# Stat 214 Final Project Rubric

| Group | Students: | | | | | |
|---|---|---|---|---|---|---|

| **Style and Presentation** | | | **0 Poor** | **1 Acceptable** | **2 Good** | **SCORE** |
|---|---|---|---|---|---|---|
| How was the report presented?  Is the writing clear and concise?  Are the graphs and tables easy to read?  Were the plots labeled correctly? Did the writer provide references? | | | Unclear | Variable clarity | Good clarity | |

| **Introduction** | | | **0 Poor** | **1 Acceptable** | **2 Good** | **SCORE** |
|---|---|---|---|---|---|---|
| Did the report adequately summarize the science of this problem?  Why are we interested in this data analysis? (How does it fit into the big picture?) What are the scientific questions? Was the data explained in enough accuracy? Are there important references to the literature that should be mentioned? | | | Poorly motivated introduction. | Some motivation. | Clearly presented dataset and scientific questions. | |

| **Exploratory Data Analysis** | | **0 Poor** | **1 Weak** | **2 Acceptable** | **3 Good** | **SCORE** |
|---|---|---|---|---|---|---|
| Was thought given to carefully exploring the possible relationships that could exist between the repsonse variable and the explanatory variables?  (e.g., Understanding differences between categorical and continuous variables.  Considering transformations and interactions.) | | No apparent understanding of the relationships. | Little apparent understanding of the relationships. | Sensible but inadequate understanding of relationships. | Solid understanding of potential relationships between the repsonse and explanatory variables. | |

| **Statistical Modeling/Results** | **0 Poor** | **2 Weak** | **4 Acceptable** | **6 Good** | **8 Excellent** | **SCORE** |
|---|---|---|---|---|---|---|
| Were appropriate regression models fit to the data?  Were valid statistical tests, confidence intervals, and prediction intervals carried out (as appropriate)?  Were valid interpretations of the model made? Were different models compared using valid statistical methods? (not just AIC!) Was the fit of the model checked using residual diagnostic plots? | Incorrect and inaccurate use of statistical techniques. | Little apparent understanding. Inappropriate and/or inaccurate use of statistical techniques. | Sensible but inadequate understanding. Not always appropriate statistics. | Appropriate and accurate use of statistics. | A very sound understanding of statistical methodologies. Exceptionally precise and concise. | |

| **Scientific conclusions** | **0 Poor** | **1 Weak** | **2 Good** | **3 Good** | **4 Excellent** | **SCORE** |
|---|---|---|---|---|---|---|
| How did the regression modeling help tell the story?  What are the conclusions of your analysis -- does this make sense, and why?  Interpret, interpret! | Incorrect conclusions and interpretation. | Lacking understanding; poor interpretation. | Appropriate conclusions and interpretation | Thoroughly appropriate interpretation, evidence of good understanding. | Exceptionally good insights; appropriate conclusion with good understanding of implications and limitations. | |

| **Additional elements** | | | | | **0 Poor** | **1 Acceptable** | **SCORE** |
|---|---|---|---|---|---|---|---|
| Was something extra attempted, or were suggestions given about extensions? | | | | | Nothing extra was provided. | Something extra was provided. | |

| | | | | | | **TOTAL** | **/20** |
|---|---|---|---|---|---|---|---|

**Narrative:**