

## Grading Rubric for Final Project Statistics

Name: \_\_\_\_\_

**Journal Article Analysis:** Give a short summary of your article. You may simply state the abstract if you like. Identify and give some explanation to the following parts of your journal article. Do not just answer yes or no. Please give a reference as to where your article is found.

<b>Journal Article set up (10 points)</b>	
Were the following sections clearly identifiable in the paper?	
	A.) Abstract & Introduction
	B.) Materials & Methods
	C.) Conclusion

<b>Data (15 points)</b>	
Variables and Hypothesis	
	D.) Did the author indicate who they were collecting data on?
	E.) Did the author indicate what the explanatory and response variables are?
	F.) Did the author indicate what type each variable is qualitative or quantitative?
	G.) Did the author give a hypothesis for the relationship between the explanatory and response variables? (Identify the null and alternative hypothesis)

<b>Data collection (15 points)</b>	
Methods of the study	
	H.) Did the author do a sampling study or experiment?
	I.) Did the author describe how they used randomization? That is, random selection in a sampling study or random assignment in an experiment.
	J.) Did the author indicate how many subjects were in the sample studied? Were there at least 30?
	K.) If the author used a small sample size, was there a legitimate reason?

<b>Analysis of Data</b>	
Distribution of response variable (10 points)	
	L.) Did the author look at the distribution of the response variable independent of the explanatory variable?
	M.) Did the author describe the distribution and note any important features, like being left or right skewed?
<b>Graphs (10 points)</b>	
	N.) Did the author include a graphical display of the response and explanatory variables?
	O.) Did the author correctly describe the graphical display?
	P.) Did the author not any important features such as outliers or patterns?

Analysis of Data continued	
Test statistics (20 points)	
Q.)	Did the author give the mean, median, mode, variance and standard deviation? Did the author explain what they indicated about the data?
R.)	Did the author include the values of test statistics and what they meant? Such as: P-values, z-scores, t-values, degrees of freedom (df), confidence intervals, and/or any others?
S.)	Did the author correctly interpret the test statistics within the context of their problem?
Conclusion (20 points)	
T.)	Did the author discuss what their analysis indicated about their hypothesis?
U.)	Did the author discuss what their analysis indicated about the relationship between the response and explanatory relationship?
V.)	Did the author have the correct conclusion about their hypothesis given their data analysis?
W.)	Was the study well formed or did it have problems such as confounding variables? If so, did the author acknowledge the problems and state further research is needed?

You may state any other material or comments that you feel is important to the analysis of the article.