**Project Title**

**Name**

**Date**

**Class**

****

**Introduction**

**Objectives:** Summarize your research question.

* What variables are you investigating?
* What motivation did you have for choosing this research topic?

**Hypotheses:** Describe the effect yu believe you will find using the technique you have chosen. Be sure to use appropriate language specific to your technique.

**Methods**

**Sample:** Briefly describe your sample data.

* What are you sample subjects?
* How many sample records did you end up with? Did you remove any outliers?
* How did you measure each variable? Include units for numeric variables and possible values for categorical variables.

**Analysis Method:** State the method you used to analyze your data.

* What software did you use? What function?

**Descriptives**

**Response Variable:** Report the appropriate descriptive statistics of your response variable. You can display these in a table like the one below:

|  |  |  |
| --- | --- | --- |
|  | **Center\*** | **Spread\*** |
| **Response Variable** | XX | XX |

**\*replace these labels with the specific measures of center and spread that are appropriate for your variable.**

**Explanatory Variables:** Report the appropriate descriptive statistics your explanatory variables. You can report them in a table like the one above, or in a frequency or contingency table.

**Results**

**Results table:** Report the results of your model in a table. The table will look different depending on the technique you use, but be sure you include the appropriate estimates/sums of squares and test statistics for each variable. Also include an appropriate measure of how well the model fits the data.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Estimate/SS\*** | **Test Statistic\*** | **P-value** |
| **Name** | XX | XX | XX |

**\*replace these labels with those that are appropriate for your analysis method.**

Provide a plot of the effect – one that best describes the hypothesis you are testing. You may have more than one plot and or table id appropriate.

**Assumptions**

**Assumptions:** Which assumptions did you confirm? Include how you checked each assumption, and if space permits, include any graphs you used to check them.

**Discussion**

**Interpretation:** Interpret the results of your model in context, citing the appropriate statistics. What does this analysis suggest about your variables? Relate the results back to your hypotheses. Did you find what you expected to?

**Limitations:** What were the limitations to your study?

* Was there a known bias in your sample collection?
* Did your data fail any assumptions?
* Name at least one confounding variable that could have impacted your results.

**Implications:** List at least one specific thing you would change if you were to replicate this research. How would that change impact your data or results? Did you find that the method you used was sufficient in answering your research question?

**References**: Cite any references you used during your entire project. Include a name or short description for any websites, in addition to the URL.