

Data Analysis Rubric (Hypothesis)

This rubric will be used for grading the second project only. See syllabus for conversion to letter grades. Getting all 'Meets Expectations' yields a grade of 3.5, a B+/A-. Some categories have values for exceeding. I may award half-credit for work that falls between descriptions.

| | Needs Improvement | Meets Expectations | Exceeds Expectations |
|-------------------------|--|--|---|
| Hypothesis | The hypothesis statement may be vague overly general, or disconnected from the data. (0) | A clear hypothesis is given that can be answered with the available data. (0.5) | N/A |
| Evidence | Support for or against the hypothesis may incorrectly apply statistical concepts to the tasks at hand. (0) | Statistical evidence is appropriately used to address the hypothesis statement. Arguments clearly flow from the data and related models and graphics. (0.5) | N/A |
| Visualizations & Models | Models, tables, and graphics may not be cohesively woven into the argument of the paper nor always appropriately applied. Graphs may make poor choices in terms of colors, data types, or fail to include proper labels. The command of some methods and theories under consideration may be weak or shaky. (0) | All models, tables and graphics are appropriately used and statistically sound. Graphics are properly labelled and visually pleasing. (0.5) | <i>For the exploratory part:</i> Inventive use of models or graphics. Graphics may contain many interwoven layers that increase information density without becoming too busy; models may include newly constructed variables or be fit on a different level of analysis than the raw data. (0.75) |
| Organization | Some aspects of the paper are not effectively addressed. There may be parts of the paper that do not further a distinct or coherent point. (0) | There is a logical structure that matches the assignment expectations. Graphics and tables are included at appropriate points. (0.25) | N/A |
| Exploratory Analysis | The exploratory portion of the report may be absent, particularly thin, or not go beyond the initial hypothesis statement (0) | The exploratory analysis uses graphics, tables, and/or additional models to find new and unexpected patterns in the data. (0.5) | The exploratory analysis shows deep insight into the dataset by drawing specific new, non-trivial hypothesis that require a very careful or multi-level analysis of the data. Results may be particularly surprising or interesting. (0.75) |

| | Needs Improvement | Meets Expectations | Exceeds Expectations |
|---------------|--|--|----------------------|
| Style | Sentence structure tends to be repetitious; errors in usage and mechanics sometimes interfere with the writer's ability to communicate the purpose of the paper. The tone or intended audience of the piece may be inconsistent or not in line with the instructions. (0) | The author demonstrates a command of good writing style through a variety of sentence structures and word choices. Statistical results are woven into the narrative rather than distracting from it. (0.25) | N/A |
| Execution | The writing contains errors and omissions that begin to impede on the author's ability to make overall arguments. (0) | The piece should is almost entirely free of spelling, punctuation, and grammatical errors. (0.25) | N/A |
| Directions | One or more directions in formatting or uploading the piece may not have been followed. (0) | All directions are followed and every aspect of the assignment answered in full. (0.25) | N/A |
| Presentation* | The presentation may presuppose familiarity with the data at hand or fail to make a cohesive argument. The presenter shows a combination of lacking in preparation or understanding of the material. (0) | The presentation follows a logical structure, makes a compelling argument, and is interesting to and appropriate for the classroom audience. The presenter has clearly practiced the material and delivers their results confidently. (0.5) | N/A |

* - If the data analysis has no presentation component, this becomes class participation during the week(s) that we are working on them.