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| --- | --- | --- | --- |
| Concept | Approaching Standard | Meeting Standard | Exceeding Standard |
| Structure | The file is missing one or more elements (title, markdown, graphs) OR is disorganized and difficult to follow | The Jupyter file consists of markdown text, graphs and code, contains a title, and is easy to read and follow from top to bottom, both visually and in terms of content. All required analyses are complete, but may be somewhat disjointed. | The file is very well organized, including subheaders as well as a title. The final document looks professional. The analysis tells a cohesive story. |
| Analysis | Analysis is missing or incoherent. Explanations and justifications are non-mathematical in nature.  Level 1 analysis is used, but is incomplete or ineffective. | Each cell of original code is rationalized in markdown text. Statistical and mathematical explanations are used to justify methods.  Level 1 analysis is used and is complete, OR Level 2 analysis is used and is nearly complete. | Provided justifications are exceptionally complex, clear, and thorough. Explanations delve into details beyond those required by the assignment.  Level 2 or 3 analysis is used and is complete and thorough. |
| Introduction and Conclusion | Introduction is absent or not useful.  Conclusions are absent, unreasonable, unjustified, or the statistical arguments used are flawed. | Introduction sets up the data set and questions for analysis.  Conclusions are reasonable and justified with generally accepted statistical arguments. | Introduction offers an organized frame through which to understand the story of the data and analysis.  Conclusions offer important insights with thorough statistically accurate arguments. |