

STAT 220: Written Report Rubric

Below is a rough list of features to look for when judging the quality of the final project report. Each section will be graded out of 5 points, for a total of 25 points: (5) exceptional, (4) very good, (3) satisfactory, (2) below expectations, (1) reasonable attempt.

In each section indicate YES/NO for if the prompt is answered. An exceptional report will typically be able to confidently answer YES to all the criteria above. Note, that these items give a rough idea of what we look for. It is possible to check off all items and not receive a 5, it is also possible to miss a few items and get a perfect score. The items listed below are only a guideline to help give a general idea of your score.

Introduction		Grade:
		<i>Comments</i>
YES/NO	<ul style="list-style-type: none">• Is the topic clearly explained?	
YES/NO	<ul style="list-style-type: none">• Is the research question/ goals for the analysis clearly explained?	
YES/NO	<ul style="list-style-type: none">• Is there any justification or motivation for this study?	
YES/NO	<ul style="list-style-type: none">• Are the outcome and explanatory variables of interest clearly identified?	
YES/NO	<ul style="list-style-type: none">• Are important parts of upcoming analysis and conclusion foreshadowed?	
YES/NO	<ul style="list-style-type: none">• Is the source of the data clearly explained and cited?	

Exploratory Data Analysis		Grade:
		<i>Comments</i>
YES/NO	<ul style="list-style-type: none">• Are any important data wrangling steps (e.g., filtering missing values, recoding variables) and any impacts of these steps clearly described?	
YES/NO	<ul style="list-style-type: none">• Is the number of observations clearly identified?	
YES/NO	<ul style="list-style-type: none">• Are the distributions of each outcome and explanatory variable visualized and clearly described? Are the distributions summarized with appropriate statistics?	
YES/NO	<ul style="list-style-type: none">• Are the relationships between variables explored with visualizations? Are these relationships discussed and interpreted in writing?	
YES/NO	<ul style="list-style-type: none">• Do all figures and tables have captions, and is the content of figures/tables sufficiently unpackaged/explained for the reader?	
YES/NO	<ul style="list-style-type: none">• Are the content of the figures and tables succinct and useful (they should not be overly redundant!)	

Results	Grade:
YES/NO	<ul style="list-style-type: none"> • Is the type of test you are using made clear?
YES/NO	<ul style="list-style-type: none"> • Is the relationship between the research question and hypothesis test made clear?
YES/NO	<ul style="list-style-type: none"> • Are the test statistic, p-value, degrees of freedom (t-test only) and alpha level clearly explained?
YES/NO	<ul style="list-style-type: none"> • Are the results of the test clear?
YES/NO	<ul style="list-style-type: none"> • Are you including a confidence interval around the statistics relevant for your hypothesis test?
YES/NO	<ul style="list-style-type: none"> • Is your Null Hypothesis Distribution shown?
YES/NO	<ul style="list-style-type: none"> • Are your model's coefficients clearly interpreted, and is the fitted regression equation presented (regression only)?
YES/NO	<ul style="list-style-type: none"> • Are your hypothesis test's assumptions, if any, investigated to make sure they are reasonable assumptions to make? (These assumptions may be assessed in an appendix section)
Discussion	Grade:
YES/NO	<ul style="list-style-type: none"> • Are all the conclusions explained in a clear and straightforward manner such that a person without statistical training or domain expertise can understand them?
YES/NO	<ul style="list-style-type: none"> • Are the results of your analysis clearly tied back to your analysis goals and research questions?
YES/NO	<ul style="list-style-type: none"> • Is there any discussion of what the results mean (e.g., are the results and conclusion connected back to the motivation for your study?)
YES/NO	<ul style="list-style-type: none"> • Are limitations of your analysis and/or data acknowledged?
YES/NO	<ul style="list-style-type: none"> • Does your discussion include a brief exploratory analysis showing how your project could be extended to include additional explanatory variables in the future?

Writing Style	Grade:
YES/NO	<ul style="list-style-type: none"> Overall throughout the report, are the ideas expressed precisely and concisely?
YES/NO	<ul style="list-style-type: none"> Overall throughout the report, is the writing and exposition in the report geared towards someone with a similar level of statistical training (e.g., the writing doesn't rely heavily on jargon, but also doesn't elaborate on minute details that don't benefit the readers understanding of the research).
YES/NO	<ul style="list-style-type: none"> Does the report include a citation for the source of the data, and reference at least one outside source, using appropriate in-text citations and a formatted bibliography?
YES/NO	<ul style="list-style-type: none"> Is the R code hidden from the reader, and is the report free from messages, warning messages, and error messages?
YES/NO	<ul style="list-style-type: none"> Is the output from your R code appropriately styled (i.e., are tables formatted as tables?) and is the report free from 'random' outputs (e.g., a p-value being printed out in the middle of a paragraph)
	<i>Comments</i>

TOTAL SCORE:

Additional Comments: