Proposal Rubric

Table 1:

Section	50-40 pts	40-30 pts	30-20 pts	20-0 pts
Statement of Problem Answers the question "What hypothesis do you plan to test?"	• There is a short discussion about the physics involved in your proposed experiment. • The purpose of the experiment is clearly stated. • Your theory/hypothesis is clearly stated, using mathematical equations when necessary.	• Answers the question "What hypothesis do you plan to test?" sufficiently that a person who was part of your experiment group would understand. • Gives enough background so that the proposal makes sense to someone who knows the experiment topic well.	• Mentions what the experiment is about. • Gives some background but little detail.	• It is difficult to tell from the introduction what the experiment is about. • Little or no background provided.
Procedures Answers the question "What will the experiment look like?"	• This section answers the question "What do you plan to do?" sufficiently so a non-expert can understand what was done. • Describes the entire procedure and setup in detail. • Describes in detail the data that will be collected. • A simple figure has been used to describe the experimental setup. The figure has a detailed caption. • Describes how uncertainty will be measured and/or calculated.	• This section answers the question "What did you do?" sufficiently so your experiment partner could understand what was done. • Describes the entire procedure and setup but lacks some detail. • A figure has been included but lacks detail (it's not a very helpful graphic) • Uncertainty has been mentioned but its not clear how these calculations will look.	• Major points of the procedure are omitted • No mention of uncertainties in your proposal. • No figure was used to descibe the experimental setup.	• It is difficult to tell what you plan to do from your description
Proposed Analysis Answers the question "What will I do with the data to prove my hypothesis?"	• A detailed description of the analysis is given. • Any needed mathematical equations/derivations have been performed as part of the analysis. • There are no mathematical mistakes in your reasoning. • Your proposed analysis will directly lead to proving or disproving the hypothesis in question.	• The description of the analysis lacks detail. • Mathematical analysis is lacking in detail and clarity. • There are no mathematical mistakes in your reasoning. • Your proposed analysis will directly lead to proving or disproving the hypothesis in question.	• The description of the analysis lacks detail. • Mathematical analysis is lacking in detail and clarity. • There are flaws in your mathematical reasoning. • Your proposed analysis does not lead to a result that will prove/disprove your hypothesis.	• It is not clear that you have a good plan for your analysis.

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Table 1: (Continued)

Section	50-40 pts	40-30 pts	30-20 pts	20-0 pts
Originality/Rigor/Relevance How original is your experiment? Does the difficulty level meet expectations?	• The experiment that was chosen is very unique. • The difficulty level is appropriate for the class.	• Some may find your results interesting but many will not. • The difficultly level was below the appropriate level for the class.	• Few will find your results interesting or relevant. • The difficultly level was far below the appropriate level for the class.	• The proposed experiment is far below the difficulty and originality standards.
Grammar Did you use proper punctuation, spelling, and grammar?	• No spelling errors. • No grammar errors. • No punctuation errors.	• Very few spelling errors. • Very few punctuation errors. • No grammar errors.	• Lots of spelling errors. • Lots of punctuation errors. • Very few grammar errors.	• Lot of spelling errors. • Lot of punctuation errors. • Lot of grammar errors.