

Lab Write-up Grading Rubric

All labs will be scored out of 100 points using the following rubric:

<u>Category</u>	<u>Maximum Points</u>
Notebook/data collection	20
Format	20
Presentation of Results	30
Interpretation/Analysis	30
Total:	100

Notebook/data collection: This portion concerns itself with your lab notebook, book keeping, and your successful completion of the experiment itself. Notebooks should contain raw data, a drawing of the setup, any calculations and equations you need to use, references to helpful pages in books, texts, papers. Notebook pages should be numbered and dated. This is the “dirty” detail of the experiment as opposed to the “clean” write-up you turn in. The lab notebook is your detailed record so that you could repeat the experiment at a later time at blistering speed.

Format: This portion of your lab grade is decided on how well you follow the instructions on the template and/or the examples provided to you (there are four decent ones posted on the course website). It also is decided on whether or not you include the relevant information. Note that you need to embed figures directly into your write-up document! Your figures will basically be telling most of the story. You just need to connect the story with words. The figures need to be embedded in the appropriate section. You need to add captions, and you need to describe them in the text. Except for the figure of the experimental setup, all the rest will most likely live in the “Results” section. Figures don’t need to be pretty but need to get the job done. We wish to be good physicists, not graphic artists, so please don’t waste time picking colors, fonts, etc.

Presentation of Results: This portion of your grade is determined by how clearly you present your data both in the form of figures and the words you use. Note that your “Results” section should not only contain the figures, but a description of what you are plotting, how you obtained the data you plotted, and very importantly the main results (maybe this is the value of the slope of a line). You also need to describe why you plotted this data. Depending on your preference and flow of your writing, you may choose to put the “why?” in the “Discussion” section, or it may even be fitting to put in the “Experimental Setup/Procedure” section.

Interpretation/Analysis: This portion of the lab grade is determined by your ability to analyze and interpret your data. This is the part of the write-up where you say “look reader, do you see the above data, it means x and y, and proves what I was trying to show you. It is good because.... It could be improved by....” You should comment on significance of results (make a judgment on the results), error, anything unexpected, etc.