

Physics 1140 Laboratory Report Score Sheet

The purpose of this document is to inform students of what is expected in a good Experimental Physics Laboratory Report. These reports will be the largest factor in the grade so it is important to understand what is required. Below you will find the major parts in a well-written laboratory report, the point value associated with each part, and a short description of what is expected in each part.

Points	Possible	Item	Description/Explanation
	1 point	Format	The report has the required name, date, section, title, headers/footers, (lab partner if applicable) and has an effective layout and information flow that is easy to read and understand.
	2 points	Context	Introduction, purpose, procedure, are all written clearly and simply without any extraneous descriptions (ie. This lab was really fun..., I measured the length of the pendulum..., My partner began by timing..., etc...). Be complete and to the point. The reader should have a good understanding of what the report is about and how the experiment was carried out after the first few lines of the text.
	2 points	Formulae	Variables/parameters defined, units provided, major equations given and explained. Numbers inserted into the equations and the results accompanied by appropriate units and Sig Figs.
	2 points	Figures	Graphs, diagrams, tables, etc... used to describe a result or related part of the experiment. Labels such as title, axes, units, headings... are all used appropriately.
	1 point	Data	Data is presented as an array/table and is given a short description.
	2 points	Uncertainties	Definitions given, source and origin/formula explained for any measured or propagated uncertainties. Sig Figs are used correctly for any stated uncertainties.
	1 point	Annotation	Explanatory text, appropriate comments, interpretation of any graphs, tables, figures, etc... given and backed up with data in the report.
	3 points	Results	Procedural and numerical correctness and completeness. Proper Sig Figs with stated uncertainties and appropriate units. Clear labeling so there is no question as to the result of the experiment.
	3 points	Analysis	Arithmetic/quantitative correctness (Is your measured value close to the accepted/known value, within errors?). Appropriate use of and interpretation of data, proper equations/formulae used to calculate final quantities from measured data. Discrepancy from the known/accepted value given and explained (if applicable)
	3 points	Conclusions	Discussion of the results is appropriate. Quantitative comparisons (discrepancy...) and objective conclusions given. Interpretation of results is backed with data from the experiment and avoidance of undue speculation. Analysis of error in the experiment is appropriate (avoid: The large uncertainty is due to Human Error, The equipment is very old and does not give good data, etc...) Avoid statements like: "This was a really fun lab", "I would recommend this lab to any one else", "This lab was really hard and should not be even available to students", etc...
	20 points	Total Score	

