

Notes on the lab write-up for physics labs (Spring 2013)

Your first (cover) page should include the following information:

Your Name, Date, Partners, Title of Experiment and the abstract.

Each lab must be the unique written effort of the student team submitting the report. You may NOT reference or use lab reports (prepared by others, outside your team) in your report preparation.

Lab reports must be electronically submitted to the appropriate address as a single pdf document. Normally, I will read through the submitted lab report during lab, noting areas for improvement. The reporting team will then revise and resubmit. This process continues until an acceptable lab report is obtained.

Title: Concise wording that describes the essence of the lab.

Abstract - a summary of your research including general methods and major conclusions. This is usually one paragraph long and should convince someone to read your paper.

Methods: - A brief discussion of experimental techniques. Diagrams are usually appropriate in this section.

Results -written usually in the past perfect tense or passive voice; describes your findings, data collected, and includes data tables, graphs, general trends, derived formulas, etc. All work and data tables must be shown here. In general, you need to have a copy of your original data with you but the data included in the lab report can be copied from your original data. **Be sure to include captions below any images used.**

Discussion and analysis - tense can vary, describes your results in relation to other data, discusses problem associated with the lab, postulates trends in the data, predicts results given different circumstances, suggests sources of error, etc. **Be sure to include sample calculations in this section.**

Literature Cited - a list of books, articles, etc., that you used to assist you in presenting your data and which were referred to in the write-up. **When citing a reference from the internet, you MUST include the URL that points directly to the document so that a single click of the mouse will bring up that exact document. Every lab report will have at least 1 citation or the report will not be accepted.**

Your presentation of the lab is important. Be sure it is grammatically correct and neatly typed. Be careful of tense changes within a paragraph. Data collected during a lab must be authentic. "Fudging" is unacceptable and unnecessary.

Lab write-ups should be as **concise** as possible within these guidelines. I am not looking for exhaustive tomes of work in a lab write-up.

As an approximate guide to how points will be assigned for the written lab reports:

+0.5 points are obtained for a clear and correct abstract.

+0.5 points are obtained for clearly stated methods, using diagrams where appropriate.

+1 points is obtained for all results included (in readable form, of course).

+0.5 points are obtained for discussion and analysis.

+0.5 points are obtained for correct and relevant and authoritative literature references.

Total for the written portion of the lab is 3 points per lab.

The total for your lab work in a lab is 10 points thus 7 points will be provided by successful and careful attention to the mechanics of the lab itself.