Physics 208A
Michelle Kaul
Laboratory Write-Up and Grading Guide

Note: All lab write-ups are due in at the beginning of the next lab meeting unless otherwise stated.

Total Lab Points Possible for each lab write-up: 100 points

Lab Write-Up Format: Cover page is to include abstract and additional pages are to include data collection/tables, results and analysis, and ending with a lab summary. Attach pre-lab to top of lab in cases where pre-lab is due with lab.

Pre-labs:
- **When assigned**, worth **30 points** of total lab score.
- Consist of questions and/or problems assigned to work out concepts to be used in lab that need to be turned in and graded.
- When material is covered in lecture prior to lab, pre-labs are due in at beginning of lab. Otherwise, pre-labs are to be turned in with remaining lab write-up.

Abstract:
- Worth **5 points** of total lab score.
- As the norm with many scientific papers, the abstract should contain a few detailed sentences stating the goal/objective of the experiment, how the experiment was performed (condensed procedure), include key details about equipment used, techniques employed, and discuss how the computations where made with reference to formulas/theory used.

Data/Calculations/Analysis
- Worth **60 points** of total lab score. (add 20 points if no pre-lab)
- Includes all raw data collected during lab experiments such as measurements, constants, and other related material. When possible, use tables for raw data collection and include units of measurement!
- Includes all calculations performed and needed for the experiment. Any final versions of tables with calculations performed when required, any graphs required, and any diagrams required (diagrams are good supplements even when not required). Additionally, all questions asked in the lab are to be answered in this section as part of the analysis.

Summary:
- Worth **5 points** (add 10 points if no pre-lab)
- In this section, discuss the results of the experiment in one to two paragraphs. Include and discuss all errors associated with the experiment(s), possible reasons for errors, and percent error when necessary. Make a comparison with your results and known results when possible.