

Lab Report Format

All lab reports and data should be typed and presented in a formal report. Any labs not typed will receive a zero. Late labs will not be accepted. You're expected to work together with your lab group to process the data, produce your results, and write your report.

A breakdown of the individual sections of your lab report and their point value is as follows:

1. **Title Page**

One page including the title of the lab, everyone's names, the course number, and the date. Lab reports will not be accepted without an appropriate title page.

2. **Abstract** (10%)

This should be a short paragraph giving a summary of the experiment and the results obtained.

3. **Introduction / Theory** (15%)

This section should introduce the reader to the topic of the lab and provide any technical background material that is required to make the lab report complete. This section should discuss concepts rather than the procedure or results, and it should give a formal understanding of the theory the lab has been designed to investigate. Make sure to include figures, equations, and tables as necessary to understand the rest of the lab report. Do not copy and include derivations that can be found in the textbook.

4. **Procedure** (15%)

In this section provide the details of how the experiment is run. Summarize the major parts of the procedure in your own words. **DO NOT COPY THE LAB HANDOUT.** A step-by-step list would be an entirely appropriate way to present your information in this section.

5. **Results** (25%)

Present the results of the experiment accompanied by any calculations you may need to further explain the meaning of any data. Discuss how you made your calculations and how you processed the lab data. Also include short discussions, when appropriate, that evaluate whether or not the results are what you would expect. Make sure the data is displayed clearly and include appropriate labels.

6. **Discussion** (25%)

This section is used to demonstrate the significance of the results, and to explain why they are or are not consistent with those that would be expected from theory and analysis. Also use this section to compare and contrast any other data taken, as well as to discuss sources of error and an estimate of their magnitude backed by simple calculations when possible.

7. **Conclusion** (10%)

Provide a short wrap up of the lab and summarize the major results.

In general, be concise and be thorough. Focus your energy and the space in your report on the important and relevant information.