

Preparing Informal Lab Reports

Informal lab reports are completed entirely in lab. To get credit for your work, you must follow the following in your lab notebook

- Complete and report on all the tasks given by the TA at the beginning of the lab
- Answer all the numbered question from the lab manual.
- Record all data taken in your lab notebook.
- Do any data analysis required by the lab and calculate a percent error.
- Check off you lab notebook with your TA

IN ORDER TO GET CREDIT FOR A FORMAL LAB

Perform all the experiments as assigned in the lab manual with your lab partner, as you would for an informal lab. You will then have one week to write up a detailed formal report on all work (including answers to all question asked in the experiment). Your TA will let you know if your lab report should be hand written in your lab notebook or typed. You will not receive credit for your work unless you have the instructor check your notebook before you leave the lab.

Preparing Formal Lab Reports

Below is a basic outline of the required sections for a formal lab report, your TA will provide you with more detailed requirements before the first formal lab. Note that TAs have the freedom to set the requirement to suit their individual teaching style and there may be some differences between lab sections.

- **Heading**, for each new day in the laboratory, in the upper right-hand corner of a new page write:

Student's Name
Lab Partner's Name
Date & Time of lab
Name of Instructor
Title and # of exp.

- **Preparation Section**: The preparation section begins the lab report and should demonstrate an understanding of what the experiment is trying to accomplish and the concepts being covered.
- **Procedure**: The procedure should describe how the experiment was done and be detailed enough that experiment could be reproduced from your description.
- **Raw Data Section**: This section should contain all measurement and observations taken during the lab. The measurements should be clearly labeled with proper units and significant figures.
- **Analysis Section**: Analysis typically includes graphs, relevant equations, non-trivial sample calculations, percent error, and discussion of sources of error. Any other relevant discussion of your data may go here as well.
- **Critical Conclusions, Insights, and Inquiry**: The conclusion should concisely convey the main results of your experiment.
- **Questions Section**: The questions section should answer all the numbered questions posed in the lab manual in numerical order with full sentences.

*See the Laboratory Manual