

FORMAL LAB REPORT FORMAT

The following is a guide for all formal lab reports in this course. You need not limit yourself to this outline. If additional information is warranted then please add it.

Title

- The title should indicate what the lab is all about. Centered at the top of the page.

Introduction & Background

- Include what is already known – with citations
- Indicate what you hope to learn (purpose of the lab)
- List of components of experimental design: independent variable, dependent variable, control factors, constants.
- Clearly identify your hypothesis
- **Caveat:** This introduction section will take some research. Do not "wing it" by making up information from your head!

Materials

- List the materials used in the lab

Procedure

- A brief description of the procedure to show how the lab was conducted
- Describe methods for controlling variables
- Describe methods for collecting data
- Note any departure from the instructions given

Results (present the data)

- Construct all data tables and charts to present the data collected
- Must include titles and labels for all tables and charts

Analysis (process the data)

- Construct all graphs needed to show results
 - Correct type (bar, line, pie)
 - Title
 - Appropriate units
 - Labeled Axis
 - Legend
- Labeled diagrams or photos

Conclusion & Discussion

- State a valid conclusion and explain WHY you think the results turned out the way they did
- Explain any unexpected results and why those results may have been obtained.
- Evaluate the data to determine if it supports your hypothesis using specific reference to the data.

Sources (each under an individual section)

- References – Works cited within your lab report in the introduction or conclusion/discussion.
- Appendix – Put any formulas used for calculating data presented or references in the lab report.