LAB REPORT GUIDELINES - Although laboratory exercises are generally carried out in small groups, lab reports, unless otherwise specified, are completed and submitted individually and should reflect individual work. Working together, problem solving, and discussion is encouraged, but compiling and writing up the report must be an individual endeavor. Copying or any other form of academic dishonesty will result in a mark of zero and referral to an administrator. Please see me if you have questions about this.

The lab report must be typed, double spaced, 12 font Times New Roman, and must include the following sections, in order:

TITLE

OBJECTIVE - State the purpose of the lab in 1 or 2 sentences. Include what you hope to find out or show.

INTRODUCTION - In 4 or 5 sentences, introduce the topic being studied and explain the applicable scientific theories/concepts. Explain why this study is relevant and refer to any similar studies that have been done on this topic.

HYPOTHESIS – Write an appropriate hypothesis that indicates the relationship between the independent and dependent variables.

PROCEDURE- Summarize the procedure in point form. Be clear and concise, so that the procedure could be easily followed by another researcher.

DIAGRAM- If applicable, include any diagrams of your equipment set-up or equipment arrangement, etc.

DATA & OBSERVATIONS- Present your results/observations/measurements neatly in data tables and/or in another format, as appropriate. Includes graphs in this section. Graphs must have all relevant elements (title, axes titles, units, etc) and be drawn with a ruler neatly.

CALCULATIONS- Provide samples of any calculations used in the study, including correct units in all steps.

QUESTIONS- Answer fully any questions included in the lab.

DISCUSSION- This section should offer a discussion of the experiment/lab activity as well as a brief outline of the procedure. List any possible sources of error in the lab. Give a clear explanation of the results, the reasons for them, what they mean, whether you consider them to be informative, and why or why not.. Address the following questions in your discussion: What factors contributed to those particular results? Were the results what you expected? Why or why not? What would you do next time to improve the experiment or correct/minimize any sources of error?

CONCLUSION- Similar to the introduction, this is a summary of what you did and why. Briefly restate your procedures, and the results obtained. Do not repeat any raw data from the data section, but instead talk about the trends, averages, and overall findings. This is a helpful section as some readers may wish to jump to the conclusion to get an overview of your study before reading the entire report.