Guide to Good Lab Report Formatting

1. Logistics

Lab report are done in groups of two. However, everyone must submit a lab report individually to Canvas by the due date.

You must use the designated Cover Page (see below) as the first page of your report. It must be all filled-in with your and your lab partner's signatures.

ELEC 342			
Lab Experiment:			
Section:			
Bench #:			
Partners	Student ID	% participation	Signatures
Date Performed:			
Date Submitted:			

Your lab report must be typed and formatted nicely. Formatting can count up to 20 marks of your total report mark.

Your formatting style must be consistent throughout, this includes fonts, headings, equations and figures.

2. General Formatting

2.1 Report Layout

Sections and subsections must be spaced and easily distinguishable, like this document.

Your report should have 3 major sections:

• The first section should contain all the filled-out data tables for each task including any calculated parameters along with your answers to all the questions that were asked in each task in the Experimental Part. This requires you to read the manual carefully. You must include the question (paraphrasing is OK as long as you are not

changing the question) and label them by Task# Step# before answering them. Important results should stand out (use *italics*, <u>underline</u> or **bold**). Usually at the end of first section, you should have the filled-out machine parameters.

- The second part is Calculation and Analysis. You must include the question and label them by Task# Question# before answering them. Equations and calculations must make sense! Do not expect us to mark something that doesn't make sense even to you. Again, highlight important results.
- The last section is your conclusion, summarizing your findings and what you have learned in that lab. You may use appendices for codes, models, etc.

2.2 Figures and Plots

Figures and plots must be done in either **Excel** or **Matlab**. Plots must have <u>titles</u> and <u>captions</u>. Plots must have <u>labeled axes</u>. Axis labels must include <u>units</u>. When plotting/fitting multiple datasets in a single figure, use different colors, line styles and/or dot styles to distinguish, and your figure must also include a <u>legend</u>. For example,

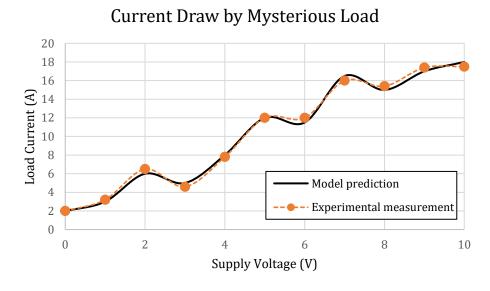


Figure 1. Comparison between model prediction and experimental measurement for the current draw by the mysterious load at different supply voltage levels.

2.3 Short Answers

You must include the question (paraphrasing is OK as long as you are not changing the question) and label them by Task# Question/Step# before answering them. Important results/observations should stand out (use *italics*, <u>underline</u> or **bold**).

Your answers must be *concise* and *straight to the point*. Use proper terminologies that you have learned in class because we are looking for keywords to test your understanding. Normally your answer should not be more than **3** sentences. If you don't know the answer, do not make something up; bring it up in the next lab tutorial to get clarification. You are, however, welcome to elaborate on the conclusion and what you have learned.