Lab Report Requirements

<u>Lab Report Contents</u> – For a lab report to stand on its own it needs ALL of the following pieces of information.

- 1. Title
- 2. Background information If you are using a new device, do a little reading and try to come up with important device characteristics, equations, or applications and explain why these are important to the operation of the device.
- 3. Objectives They are listed on the lab sheet provided for you, just word them so I know that you understand them
- 4. Equipment Make a thorough list of all hardware, components and software you will need.
- 5. Procedure You must include procedure for everything done in the lab. Be thorough and reference to all data taken.
- 6. Results Include all tables, plots, graphs, figures, calculations, and anything else you were asked for in the lab sheet.
- 7. Conclusion Where the lab objectives completed? Were there any irregularities in the data? Did everything work perfectly and how did you know? Analyze your results on top of any closing questions that may be asked of you.

Note that you do NOT need to have performed the lab to complete parts 1-5. All of these could be done before hand. If they are completed the lab should only take 1-1.5 hours.

Lab Report Formatting

- 1. This is a professional lab report. The formatting should be clean and consistent. There should not be jokes or comments about how late you stayed up writing it.
- 2. Each section should be labeled clearly. Headings should not appear at the bottom of the page.
- 3. If sections are numbered, the numbering should be sequential. Do not skip from section 1 to 3 or start at sub-section 'e'.
- 4. All tables, graphs and plots should be numbered and titled. For example, "Plot #1: Typical I-V Characteristics for a Silicon Diode." Just from reading the title, we should be able to anticipate what the graph should look like.
- 5. Graphs with more than one curve on them should have a legend so that we can clearly distinguish between the two. Do not smooth or modify the curve in any way. At most place straight lines between the data points to enhance the shape.

- 6. Tables should have a header which shows what data is in each column and what units it is recorded in. If the table must span multiple pages, repeat this header so that the reader does not have to flip back and forth.
- 7. All data items should be referred to in the text. They serve no purpose without some explanation of why the data was taken or how.

Final Note: Write your own lab reports. You would be surprised how easy it is to find out who is working together just by reading the reports.