(ECE 112) - GUIDELINES FOR LAB REPORTS

1) Lab write-ups should seldom be longer than about 6 pages, including diagrams, data, etc. The format for the lab write-up is given below.

2) Your lab reports must be typed. Do not hand in hand-written reports, or reports that are on torn-out notebook pages. You will not receive credit for these reports.

3) Lab reports should be written in the third person throughout, e.g., "measurements of the time constants for various RL circuits were made" , not " I measured the time constant for various RL circuits". This is the style for technical writing.

4) If you have trouble with any of the information in these guidelines, please see the instructor or TA for guidance. If you vary from the stated guidelines without permission, you will be graded accordingly.

5) Pre-lab data should be included with the lab report that is turned in.

6) Single-sided reports are required

FORMAT FOR LAB WRITEUPS

Lab reports will follow the following format, and will include the pages indicated:

TITLE PAGE: This page will contain the following information:

Name
Date
Title of Lab
Lab Number
Abstract

Abstract is one paragraph that explains the purpose of the lab investigation, the methods employed, and a short summary of the results. It should be written so that a technically literate person who does not have specific knowledge of the subject can understand the gist of the report. It is typically only about 4 or 5 sentences.

BODY OF REPORT (start on new page)

Theory: Explain what the lab is trying to demonstrate or explore (the purpose of the lab) and give any theoretical exposition as required. For instance in a lab where you have to work with a specific circuit, explain the formula derivation - you don't have to put in every step of the derivation. In other cases, you should explain the design process for the various circuit configurations that are used. The end result of this section should be

whatever formula you will attempt to verify through measurement in the remainder of the lab.

Methods: Give an explanation of the measurements or simulations that you perform in the lab. Draw any diagrams (block diagrams, flow charts, schematics, etc.) as necessary. Hand drawn, but neat, diagrams are OK.

Data & Analysis: Report the measured data that you collected in table form and perform any required data reduction. When possible and appropriate, assign error values to your measurements, i.e. indicate the accuracy of the data you collected. BE QUANTITATIVE: for example, if you are measuring delay times and if one device has a longer delay than another, don't say "the delay was longer". I won't know if it was a few microseconds, minutes, or hours. Tell me how much. Eg. 10 microseconds longer.

Summary: In the summary section, compare the measured results to the predicted results and try to explain any glaring differences, if there are any.

Late reports will not be graded!!!!