Guide to Writing ECE 410 Group Lab Reports

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Introduction

For group lab assignments, the group will submit a single group report and each student must submit an individual project analysis. The report format described here will be used for all group lab assignments including the Design Project Report. Check off with the lab TA can be done by any team member by the lab due date.

Group reports are significantly more extensive (especially considering there is nearly three times the work to cover) than individual reports. Be sure to budget your time and organize group efforts to allow for report preparation.

Refer back to the Guide to Writing Lab Reports for additional comments and advice.

Group Report Format

Each group will complete a single report following the format below. The reports should demonstrate a professional effort to document your work. This is an expanded version of the standard lab reports created for previous labs with a more thorough description of the work completed and analysis of results obtained. The most significant differences are the addition of a ***Design and Results*** section, which will comprise the majority of your report, and a requirement to embed figures, whenever possible, within your report rather than attaching them at the end. Notice that some sections of the standard report are not in the group report but should be contained within your Individual Project Analysis documents.

Report Sections

Cover Sheet

Include the Grading Sheet with your check off grade as a report cover sheet.

The following sections should be type-written within the body of the report. Include clearly highlighted heading to match the section names.

Title

Include the following information centered at the top of the first page. Change the name of the assignment, names, group number, and date as appropriate.

ECE 410, Lab X Report
Group G1: John Smith, Kathy Jones, Mark Schmitt
January 1, 2015

Lab Overview

Summarize, in your own words, the purpose of this lab and what you accomplished. Be concise but more detailed than in standard lab reports. Highlight important results obtained from this assignment (consider this an executive summary). [1/2-1 page]

Design and Results

Briefly describe each major step of the assignment and show appropriate results of each step. Include figures from Cadence and tables of data when appropriate. Divide into subsections as needed to help the reader thumb through your report. This is the major section of your report and should be given significant attention. [2-6 pages]

Discussion Topics

Provide a concise but complete answer/response to the Discussion Topics from the lab assignment. It is preferred if you copy the question/topic before your response.

Figures

Unlike standard individual reports, figures for group reports should be embedded within the body of the report. If you wish to include hand-drawn sketches, calculations, etc., these may be attached at the end but should be clearly labeled with a figure/table caption. ***All figures and tables should be referred to within the text of your report*** (e.g., "as shown in Figure 2"), and descriptive captions must be included on each figure. You should never insert a figure without describing it within the text, and whenever possible, the figure should come after it appears in the text.

Try not to leave large blank spaces on a page. If the next figure won't fit, put it on the next page but continue with your text. Figure images should be cropped to exclude unnecessary user-interface or operating system graphics. Keep figure sizes reasonable: small figures should not take an entire page; large figures should not be so small that important detail cannot be seen.

Individual Project Analysis

The individual project analysis is separate from your group report and should be turned in individually by each student. These documents will be held confidential; the instructor/TAs will not share them with any students. (Reminder, you need to submit one of these for your final design project report also. Students often forget this, so please try to remember). The individual project analysis should have the following sections:

Title:

At the top of the page, include the information shown in the example below. List your name first and underline it. Change the name of the assignment and date as appropriate.

ECE 410, Lab 7, Individual Project Analysis
Group G1: John Smith, Kathy Jones, Mark Schmitt
January 1, 2015

Summary of Experience:

Comment on your experience in this assignment. What did you learn from your efforts? Any particular results/discoveries that were interesting or confusing? Did you achieve the learning objectives? (1/4-1/2 page)

Feedback:
List things that were good or bad about this assignment, things that were unclear or helpful, and issues you would like the TA or instructor to address. Constructive comments are critical to improving the lab.

Time Required:
Estimate the time you spent to complete this assignment. Round to nearest ½ hour.

Teamwork Assessment
Comment on the effectiveness of your team and any teamwork issues you encountered in completing this group assignment. ***Include a listing of, in your opinion, the % effort contributed by each team member (out of 100% total)***.