ECE 253 Lab Write-up

Forrest Brewer

What should and should not appear in your class progress reports for labs and project.

Despite the seeming simplicity of a two-page limit for the report length, it pays to carefully present what you did, how you did it and most importantly, why it was done. Reports generally follow a similar plan based loosely on the make-up of a scientific paper, modified to account for the large amount of common knowledge in a planned. lab exercise.

Classically a report has the following sections:

- 1. Title and name of experimenters.
- 2. Purpose and expected goals of the lab -- in a design project this is often replaced with a clear description of what is to be designed. (i.e. a spec) and the design goals.
- 3. Methodology
 - a. Overview of design tasks
 - b. Assumptions required for design analysis and procedures
 - **c.** Observations from the design tasks
 - d. Plan for design testing
- 4. Results
 - a. Metric results -- did you meet your goals? Tables and interpretations
 - **b.** Limitations of the design you constructed
 - c. Design Test results if assumptions did not agree with design expectations
 - d. Road Blocks and parts that did not meet spec
 - e. Issues and sources of errors in the lab
 - f. (Optional) Suggested improvements to lab

This probably seems impossible to fit into 2 pages, but many sections do not apply to a given lab write-up. If you have important figures or displays (very rarely commented code!) they do not count in the 2 pages. Save a few trees and do not create a title page for a 2 page report!

For the class term project, you have 4-5 pages if you need it, but follow a similar practice of describing what you observe, what you assume, what you did and what does and does not make any sense to you. The goal of the write up is to be clear and describe what you did and how well your ideas met the design goals (or at least your read of the design goals).