Technical Report Format

The presentation and report of any engineering or scientific work are probably as important as the actual work. Credit for a discovery or development of new concepts cannot be received until the work has been described in a report or paper that is readily available for other people to read. It is often stated that engineers upon graduation will spend their first few months of work doing about 30 percent engineering and 70 percent writing about it. Technical writing is an important skill for engineers and computer scientist. In numerous environments, a report is written for a specific **audience**.

Thus, it is important to first identify the intended audience (e.g., a supervisor as compared to a colleague) and to recognize the type and order of information the reader is seeking. The report format, therefore, varies. However, most reports include three essential elements: introduction, narrative, and conclusion. Remember that **brevity and clarity are important** and the report should be easy to read. All reports should be written in the third person (e.g., use "the pressure was measured..." instead of "we measured the pressure..."). There are no excuses for misspelled words. Also, proof reading cannot be over-emphasized. If possible, have a friend read the report for grammar, style, spelling, clarity, and typographical errors. Also, make sure nouns and verbs agree. Additional advice on writing technical reports including the introduction and abstract can be found in: http://www.ittc.ku.edu/~frost/EECS 563/Writing%20Technical%20Reports.pdf.

Use the following outline for class technical reports:

- 1. Title page (include your name and student number)
- 2. Abstract
- 3. Table of contents (with page numbers)
- 4. Introduction
 - a) Describe what you trying to do
 - b) Clearly state the question being addressed
 - c) Describe the motivation; who is interested in the solution.
 - d) Summarize the main results and their significance
- 5. Narrative
 - a) Methodology: overview of methods used, including associated theory, system model, block diagrams, and/or system parameters as appropriate
 - b) Discussion of results (all plots and tables included in the report must be discussed in the text, all plots must have axis labels with units, all plots and tables must have captions, all plots and tables must have figure or table numbers. In the text use the figure or table number to refer the associated figure or table.)
- 8. Conclusions and lessons learned.
- 9. References
- 10. Appendices (if needed)

Modified from: http://css.engineering.uiowa.edu/~expeng/labmanual/rep_format.pdf