Final Lab Report Guidelines

The submission deadline for the final reports is **Friday 10/16, 11:59PM**. The submission is electronically via pdf to my email ([Muehle@msu.edu](mailto:Muehle@msu.edu)), not as printout. Late submissions will be graded as not handed in and consequently receive a 0%.

The following supplemental materials have to be attached as appendix:

1) Both pages of all four scanned lab reports.
2) The written code, including the comments, from Labs 3 and 4
3) (Optional) When returning the tools to the ECE shop you will receive a return sheet. The policy this year states, that no grade for the lab will be assigned until the return sheet is returned. Thus it is highly recommended that you are returning the tools soon after the final demonstration. You can either return the paper copy to Dr. Grotjohn or attach a colored scan to the final report. The latter is preferred.

The lab report covers all four individual weekly labs and should be written in a way to emphasize the four labs as one piece instead of four individual ones. It should contain (i) an introduction, where the tasks and objectives are presented. The introduction basically should answer the question “Why are we doing this?” (ii) A chapter on the experimental procedures should be included and some of the heavily used equipment, such as the scope, should be discussed briefly. An overview of the used microcontroller would be placed best in this chapter as well. (iii) The most important chapter of the report will be the reporting of your individual labs. The layout of this chapter is all your choice, but I would suggest either using each lab as a subchapter or dividing it in a circuit and programming subchapter. Here you will present all the work you have done to achieve the final design goal. The printed plots will be really helpful to demonstrate this. Thus all plots have to be scanned and used in the report as well. Best is to incorporate the plots in the suitable chapter instead of attaching them in the end. Do not forget to name and label the plots and refer to them in your writing. **All questions found in the manuals and any calculations required are presented in this chapter.** This chapter can be concluded by some overall words on the final design. (iv) The report will be finished with a generic summarizing chapter in the end. Here you can reflect what you do have learned, but also which struggles did you encounter. And I am certain everyone learned something more in-depth than just “I mastered using a scope”. This is also the right place to leave feedback on the lab procedure and manuals. (v) And do not forget the required appendices as pointed out above.

If you have any questions on the format or the content while working on the final report feel free to send me an email.