

## EGR 220 One Page Lab Memo Guidelines – also see class slides

The purpose of the lab memo is to provide a means for you to reflect upon what you are learning in the course and through the lab experiments. In general, for each lab you need to:

1. Be clear on what the objective of the lab is – why are you performing these experiments?
2. **Summarize** what you did, possibly guided by the questions posed in the lab handout
3. **INCLUDE ONE STATEMENT** DEMONSTRATING YOUR GROWING UNDERSTANDING OF YOUR SELECTED QUESTION OF UNDERSTANDING. YOUR STATEMENT SHOULD *GO BEYOND* WHAT IS PROVIDED DIRECTLY IN COURSE MATERIAL, AS A MEANS TO DEMONSTRATE YOU ARE PROCESSING AND REFLECTING ON YOUR QUESTION, AND PUSHING YOURSELF TO A DEEPER UNDERSTANDING.
  - Make a statement explaining your growing/evolving understanding
  - Comment on a new insight
  - Comment on insights gained from your hands-on work versus text book problems
  - Write a well-posed question about the question area
  - ... Comment on what you have learned And what You Still Need To Learn

### While doing each experiment

- Think about what you *expect* for results (to identify unexpected results along the way).
- Record observations and results, results and questions you encounter along the way.
- Sketch relevant diagrams for each experiment – circuits and results (waveforms...)
- Make notes on things you are learning, and that you should be learning, to review later.

### Note for figures, tables and citations

Your memos will often include figures, drawings, tables and sometimes references – use the format you learned in EGR 110. (You must *always* tell a reader why she wants to look at your figure or table, what information it contains and why this is interesting or relevant.)

### What to hand in:

**Your memo must be a stand-alone document** that would make sense to any reader who happened to read it. You should hand in *no more* than **one 1-page memo for each LAB TEAM** (one page text, figures can be additional). Pages of text beyond one page will not, in general, be read or graded. Your memo will have the following elements.

- Informative title, all lab partner(s) name(s) (note that “Lab 1” is *not* an informative title).
- Objective: A concise statement of the purpose of the experiments *in your own words*.
- Results
  - Including well labeled figure or table with data, as needed.
  - Including content from the pre-lab *as needed* in order to present a complete picture of the lab activities and results. Do NOT simply attach the pre-lab.
  - Equations will typically be on their own line (not in-line with text).
  - Concise discussion relating to questions in the lab hand-out, as relevant.
- One concise and elegant statement of *what you learned* (see #3 at the top of this page)
  - \* **one statement** demonstrating your growing understanding \*
  - Focus on *your* Question Of Understanding
  - \* Note that this statement *must* demonstrate some *independent thinking and learning*. \*