

# **EE4830 Senior Design II Final Paper and Oral Presentation Guidelines**

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## **\*Abstract**

- Brief overview (10-15 lines of text) of what you did, why you did it, brief summary of results

**Keywords:** If someone was searching for your paper, what search words would help them find it.

## **\*Overview**

- Project scope
- Goals
- Overview of report. What will be covered and in what order. Brief summary contents of Appendix.

## **\*Background**

- Technical background information needed by the reader to understand the project.

## **\*Technical Project Description**

- Describe technical details of project. Suggest top down approach. Provide an overview of the entire project and how pieces interact. Then provide a detailed description of each subsystem.
- Your technical description should be targeted for fellow senior design students (junior engineers).
- There should be sufficient technical detail so one could completely reconstruct your project.

- Demonstrate that sound mathematical, scientific, and engineering principles were applied through out the design.
- When discussing software use Structure Charts and UML Activity Diagrams. Provide a copy of well-documented code in appendix.
- Discuss other design alternatives that were considered and why they were not chosen.

### **Testing**

- Discuss in detail how the project was tested to demonstrate that it is working correctly.

### **Packaging**

- Discuss how the project was packaged. Provide detailed mechanical diagrams in the appendices.

### **\*Other Considerations**

- **Project cost:** include detailed list of components, source of component, and component cost. Include the cost of packaging, mounting hardware, etc.
- **Ethical Considerations:**
- **Social Considerations:**
- **Safety:**
- **Environmental:**
- **Aesthetics:**

### **Lessons Learned**

“Knowing what I know now what would I do differently if I could redo the project?”

### **\*References**

Internally document all information not readily known. Provide source using number within bracket [1] within the body of text. In the **References** section, list references in order referenced within paper. Use MLA format to document sources.

## **\*Appendices**

- A. \*Schedule – MS Project
- B. \*Parts Lists
- C. \*Circuit Diagram
- D. Construction Diagrams
- E. Structure Chart for Code
- F. UML Activity Diagram for Code
- G. Well-documented Code

### **Additional details:**

- Proofread!
- Spell out all acronyms on first use.
- Use 12 point, Times New Roman font for report
- Do not write in 1<sup>st</sup> or 2<sup>nd</sup> person. No “I”, “we”, “you”, etc.

### **Oral Presentation Guidelines**

- Use same basic outline as written presentation.
- You must use Power Point slides
- You will be speaking for 20 minutes—this will require 20-25 slides maximum
- Avoid “cuteness” in slides – this is a technical presentation.
- Dress for success
- Do not read slides—speak to audience
- Avoid dense slides – e.g. small font, lots of detail
- Choose slide colors carefully. Some color combinations blend with one another.
- Your presentation will be evaluated by a team of engineers. Gear the technical level of your presentation to them.

## **Poster Display Guidelines**

In addition to your oral presentation you need to create a poster that will be displayed during a “poster session” that will probably occur between 8 and 9 am. You will get a chance to meet the judges one-on-one and discuss your project.

You will create your poster in PowerPoint (see directions below) and then print it in the College Computer Lab (EN 1032) on their large printer. To make the PowerPoint slide:

- open PowerPoint
- pick a slide (under Home, Layout)
- go to Page Set Up submenu (under Design)
- slides sized for: custom
- landscape
- set width to 48” and height to 36”
- Save

The ECE Office has all of the necessary glue to put your poster onto the foam core board. The foam core boards are in the senior design lab.

# Senior Engineering Design Symposium

## Project Presentation Evaluation

**Engineers:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Project:** \_\_\_\_\_

	<u><b>Poor</b></u> 0	1	2	3	<u><b>Best</b></u> 4	
1. Were the project scope/goals clearly presented?	0	1	2	3	4	N/A*
2. Was it evident that the project analysis was based on sound mathematical/scientific/engineering principles and that they were appropriately applied?	0	1	2	3	4	N/A
3. Was it evident that various design alternatives were considered?	0	1	2	3	4	N/A
4. Were the specifications in the design contract met or exceeded?	0	1	2	3	4	N/A
5. Was a prototype cost provided?	0	1	2	3	4	N/A
6. Was it clear that working hardware/software resulted from the design process?	0	1	2	3	4	N/A
7. Were the results of the design clearly presented, and conclusions and recommendations for future work spelled out?	0	1	2	3	4	N/A
8. Were the presentation mechanics appropriate (dress, mannerisms, speaking voice, etc.)?	0	1	2	3	4	N/A
9. Were visual aids/demonstration materials suitable?	0	1	2	3	4	N/A
10. What was the overall assessment of the project?	0	1	2	3	4	N/A

**Comments:** \_\_\_\_\_

\_\_\_\_\_

Evaluator: \_\_\_\_\_

\*N/A - Not Applicable