

## Hardware Demonstration and Faculty Design Review

Thank you for agreeing to participate as a faculty review team member for the EE492 Hardware Demos and Design Reviews.

### *Things to keep in mind:*

Each student project team member is required to participate. The demonstration and review should be supported by the project team's Design Fair poster display, clearly stated project objectives, schematics, flow diagrams, bill of materials, performance verification, alternatives considered, and similar materials sufficient to demonstrate the performance goals.

*Grades are to be assessed primarily on the degree to which the project objectives have been achieved.*

You and the rest of the Review Team should also assess the project team's preparation (documentation ready, readable and sufficient), the ability of each team member to answer project-related questions, and whether or not the appropriate test equipment is available to verify the project's performance.

Project team members without demonstrable evidence that the design goals for their portion of the project have been met should be awarded low scores. Keep in mind that the individual Review Team grades represent 20% of the overall course grade recommendation, so the grade you assign is not necessarily the same as the overall course grade the student will receive—but it is a significant factor.

### **For a grade of 'A', the student...**

- Presents a working prototype (or equivalent design output relevant to the particular project) reflecting excellent engineering values and professional standards.
- Demonstrates a thorough understanding of the subject matter using effective communication skills.
- Has a well organized presentation, including supporting materials that are of superior quality for a senior in our undergraduate program.
- Without prompting, explains the project objectives and the design choices used to achieve the objectives.
- Uses well-chosen examples, diagrams, statistics, etc., to aid the review team.
- Shows supporting material that is free of distracting grammatical, spelling, and typographical errors.

### **For a grade of 'B', the student...**

- Presents a working prototype (or equivalent design output relevant to the particular project) with perhaps a few features not completely finished.
- Demonstrates an adequate understanding of the subject matter in a coherent fashion.
- Has a somewhat organized presentation, including supporting materials that are of above average quality for a senior in our undergraduate program.
- Is able to explain the project objectives and the design choices used to achieve the objectives, perhaps with the need for follow-up questions and clarifications.
- Uses an adequate set of examples, diagrams, statistics, etc., to aid the review team.
- Shows supporting material that is free of distracting grammatical, spelling, and typographical errors.

### **For a grade of 'C', the student...**

- Presents a set of working modules with some missing interconnections.
- Demonstrates a minimal understanding of the subject matter using average communication skills.
- Has a somewhat disorganized presentation, including minimal supporting materials that are of marginal quality for a senior in our undergraduate program.
- Requires prodding and extensive follow-up questions and clarifications.
- Has insufficient supporting material to convince the review team of the validity of the various design choices.
- Provides supporting material with some distracting grammatical, spelling, and typographical errors.

### **For a grade of 'D+' or worse, the student...**

- Presents only a non-functional or trivial prototype component.
- Is unable to demonstrate even a minimal understanding of the subject matter.
- Has a non-existent or very disorganized presentation, lacking supporting materials or any other redeeming features.
- Is unable to convince the review team that the work represents what is expected for a 3-credit semester-long course.
- Poor or completely sub-standard documentation and/or communication skills.

Project Name: \_\_\_\_\_

Reviewer name and signature: \_\_\_\_\_

Please assign an overall team grade on the A-F scale. Use + and – (e.g., B+, C-) if you wish.

Overall team grade: \_\_\_\_\_

Please assign an individual grade for each student on the A-F scale. Use + and – (e.g., B+, C-) if you wish.

Student name: \_\_\_\_\_

Grade: \_\_\_\_\_

Student name: \_\_\_\_\_

Grade: \_\_\_\_\_

Student name: \_\_\_\_\_

Grade: \_\_\_\_\_

Student name: \_\_\_\_\_

Grade: \_\_\_\_\_