

## AME40463: Senior Design Project - Spring 2010

### **Preliminary Design Review (PDR)**

Beginning on Tuesday, Jan. 26, each Platform group will make a formal oral technical presentation focusing on the status of their group's platform (Gold Team groups on Tuesday and Blue Team groups on Thursday). This is a graded event for both the group and the presenter. A form that is to be completed by the group prior to the presentation and submitted to the evaluator before the presentation begins and also serves as a grading rubric for the PDR is provided below.

General guidelines for the PDR are:

1. Each group member will make two (and only two) PDR presentations during the semester.
2. Depending upon the group size, one or two students will make the presentation each week. If two students make the presentation, they should make every effort to split the presentation so that each has approximately half of the time to present.
3. The Platform group will assign students to each week's presentations. The Platform group coordinator should submit their assignments for all 10 PDRs via email to [batill@nd.edu](mailto:batill@nd.edu) by Jan. 21.
4. The formal presentation will have a strict 7 minute limit, followed by a 15 minute Q/A period.
5. The PDR Evaluation forms indicate the baseline information required for the presentation. Groups are encouraged to provide additional information and address other issues that they feel will help describe the status of their design during the presentation or discussion.
6. The evaluator reserves the right to direct the group to address a specific issue during the next PDR and will indicate that on the Evaluation Form and the group will be expected to address those questions in the next presentation.
7. The reverse side of the Evaluation form should provide a list including each group member and their plans for how they intend to use their design studio time between the end of the current PDR and beginning of next one.
8. The PDRs will be presented in 126 DeBartolo. All visual aids must be compatible with the computer/projection equipment in that room. The presenter/s are responsible for operating the computer/projection equipment. The times for each group's PDRs are in a document posted on Concourse and all group members must attend each PDR for their group.
9. The visuals for each PDR must be archived on the Platform group's netfile space in .pdf format and a copy emailed to Mr. Newkirk by the end of the day on which it is presented.

**The focus of the PDR must be on the status of the platform and NOT on the course or course-oriented deliverables. As an example, a "key issue to be addressed in the next week" must not be to "write our trade study proposals" but should be an item like "complete the design of the steering mechanism, prototype that concept, select the primary servo and identify a vendor." The entire group should work together with the presenter/s to make sure that the PDR addresses key engineering issues and concerns.**

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Platform Group: \_\_\_\_\_

PDR Number : \_\_\_\_\_

Presenter #1 / Grade: \_\_\_\_\_ / \_\_\_\_\_

Group Grade: \_\_\_\_\_ / 15

Presenter #2 / Grade: \_\_\_\_\_ / \_\_\_\_\_

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

**GROUP PROGRESS EVALUATION:**

**1. Previous Week's Action Items (4 pts)**

a. Item 1: \_\_\_\_\_

Action taken:

\_\_\_\_\_

b. Item 2: \_\_\_\_\_

Action taken:

\_\_\_\_\_

**2. Next Week's Action Items (4 pts)**

a. Item 1: \_\_\_\_\_

Planned Action:

\_\_\_\_\_

b. Item 2: \_\_\_\_\_

Planned Action:

\_\_\_\_\_

**3. Current Status of Concept (3 pts)**

a. Status of the design including current graphics:

\_\_\_\_\_

b. Is the project "on-schedule?" Are there any show-stoppers?

\_\_\_\_\_

c. Group plan for use of studio time during the next 7 days. (on reverse side of form)

**4. Group's effectiveness in Q/A (4 pts)**

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**EVALUATION OF REVIEW PRESENTER/S:**

**1. Presentation Skills: Presenter #1 \_\_\_\_\_ (5 pts)**

a. Ability to convey content: \_\_\_\_\_

b. Effectiveness of presentation style and visual aids: \_\_\_\_\_

**2. Presentation Skills: Presenter #2 \_\_\_\_\_ (5 pts)**

a. Ability to convey content: \_\_\_\_\_

b. Effectiveness of presentation style and visual aids: \_\_\_\_\_

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**Platform Group:** \_\_\_\_\_

**PDR Number :** \_\_\_\_\_

**Presenter #1 / Grade:** \_\_\_\_\_ / \_\_\_\_\_

**Group Grade:** \_\_\_\_\_ / 15\_\_

**Presenter #2 / Grade:** \_\_\_\_\_ / \_\_\_\_\_

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

**GROUP PROGRESS EVALUATION:**

**1. Previous Week's Action Items (4 pts)**

a. Item 1: \_\_\_\_\_ Concise statement of the first key issue defined in last week's PDR \_\_\_\_\_

Action taken:

\_\_\_\_\_ Summary of actions taken to address the first issue \_\_\_\_\_

b. Item 2: \_\_\_\_\_ Concise statement of the second of key issues defined in last week's PDR \_\_\_\_\_

Action taken:

\_\_\_\_\_ Summary of actions taken to address the second issue \_\_\_\_\_

**2. Next Week's Action Items (4 pts)**

c. Item 1: \_\_\_\_\_ Concise statement of the first key issue to be addressed during the upcoming week \_\_\_\_\_

Planned Action:

\_\_\_\_\_ Concise statement of the planned action to address this issue \_\_\_\_\_

d. Item 2: \_\_\_\_\_ Concise statement of the second key issue to be addressed during the upcoming week \_\_\_\_\_

Planned Action:

\_\_\_\_\_ Concise statement of the planned action to address this issue \_\_\_\_\_

**3. Current Status of Concept (3 pts)**

a. Status of the design including current graphics:

\_\_\_\_\_ Summary and graphics (sketches acceptable prior to Feb. 16 – must be CAD after Feb. 16) \_\_\_\_\_

b. Is the project "on-schedule?" Are there any show-stoppers?

\_\_\_\_\_ Concise statement of any potential serious problems with design, schedule or budget \_\_\_\_\_

c. Group plan (by individual) for use of studio time during the next 7 days. (on reverse side of form)

**4. Group's effectiveness in Q/A (4 pts)**

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**EVALUATION OF REVIEW PRESENTER/S:**

**1. Presentation Skills: Presenter #1 \_\_\_\_\_ (5 pts)**

a. Ability to convey content: \_\_\_\_\_ LEAVE BLANK \_\_\_\_\_

b. Effectiveness of presentation style and visual aids: \_\_\_\_\_ LEAVE BLANK \_\_\_\_\_

**2. Presentation Skills: Presenter #1 \_\_\_\_\_ (5 pts)**

a. Ability to convey content: \_\_\_\_\_ LEAVE BLANK \_\_\_\_\_

b. Effectiveness of presentation style and visual aids: \_\_\_\_\_ LEAVE BLANK \_\_\_\_\_

## AME40463: Senior Design Project - Spring 2010

### **Instructions for PDR Preparation and Presentation**

Step 1: Fill out the PDR Evaluation Form as a group **PRIOR to class:**

- Can be typed or handwritten, but must be legible!
- Keep it brief, only a short response is needed.
- Do not forget to include the Week, Group and Presenter/s at the top of the page.
- Be sure to leave the Presentation Skills portion blank.

Step 2: Create slides for PDR presentation:

- Slides should contain vital info, nothing more; excess information is distracting.
- *Quantitative* information is absolutely necessary for an effective presentation.
- Slides should complement the presenter, not vice versa.
- You can also bring hardware or prototypes to the presentation, and this is encouraged.

Step 3: Presenter should practice the presentation with the group until comfortable:

- Keep the presentation under 7 minutes - you will be stopped at 7 minutes – you may want to have a member of your group keep time and alert the speaker/s.
- Make consistent eye contact with the audience. If this makes you uncomfortable, scan the back of the room above everyone's heads.
- Stand still while presenting; swaying from side to side or pacing is distracting.
- Use hand motions but keep them under control.
- Remember, practice makes perfect!

### **Suggestions for PDR Preparation**

- The entire group should be involved in the preparation process – 15 points of the PDR grade is a group grade!
- Do not leave the presenter/s to do all the work. The presenter/s should have the input of each group member. Information from each member is necessary to be effective.
- You may want to consider developing a group template such that each week's PDR format is similar. This will also ensure that all important areas/issues are covered each week.
- Remember that the PDR is an up-to-date representation of the status of your platform. The information contained in the presentation should be as current and detail key technical elements of the design. Using the same graphics week-in and week-out to illustrate your design will not be acceptable.
- Do not be concerned to say you are behind schedule or encountering technical problems, but be sure to detail your plans to address the issues.
- Be sure your presentation flows from slide to slide. Smooth transitions are critical.
- **Be prepared to discuss any issue related to your design and its status during the discussion following the presentation. All members of the group can and should participate in the discussion.**