Assignment Sheet
Preliminary Design Review Presentation

Length of presentation: **Approximately 10 minutes, check with your project advisor**
Requirements: **Each group member must present using PowerPoint**
Due date: **Talks will take place March 3-15 in your project section**
Grading: **Graded by your Project Advisor**

Purpose of PDR Presentation

The PDR presentation is standard practice in industry and academia. PDRs usually take place at the half-way point of the project and are focused on providing your sponsor and engineering peers a thorough technical review of the design. The goal is to convince your sponsor/funding source that your design is sound, that reasonable progress is being made, and that a favorable outcome is likely.

Effective PDRs

- Communicate where you really are in the design process (current status)
- Present specific design problems/challenges/issues in a technical manner
- Enable the audience to provide constructive criticism and meaningful feedback on the design
- Do NOT summarize the Proposal

PDRs are essentially "show and tell" presentations. The audience expects to see the design and the work you have been doing. Three specific ways to show your work are listed below:

1. Show the <u>actual thing</u> you are working on
2. Show a <u>diagram/figure/drawing of the thing</u>
3. Show <u>things that look like the thing you are designing</u>

PDR Content

The standard content for PDRs includes the following:

- **1st Title slide:** Descriptive title of project, name of group members, affiliation, date of presentation

- **2st slide:** Summarizes four key pieces of info: what, why, who, cost

- **3nd slide:** List of the technical objectives/design goals

- **Slide(s):** Illustration showing a photo, diagram of what is being designed

> Depending on your project, you might show your design or things like it in Slide 3, then list your objectives. The order can be switched.

- **Slide:** Current status of your project (what have you completed up to this point?)

- **Slide(s):** In-depth review of the design, including problems/challenges/issues (you don't have to present solutions to the problems, but you can)

- **Slide(s):** Block diagrams, screen layouts, flow charts, diagrams, digital photos, drawings, etc.

NOTE: High-level block diagrams are required for every PDR presentation. Show functional elements, clearly label each element, indicate interconnections and connectivity type, label all interconnections, use arrows to show directionality.

- **Slide(s):** Brief explanation of acceptance testing that has been conducted at this point

- **Slide:** Project schedule and future work with specific dates of completion of major milestones (<u>not the Gantt Chart</u>)

- **Slide:** Budget and cost analysis, if appropriate (check with PA)

PDR Documentation Package

In a 10 minute design review, there is no way to cover all of the project details. A supplementary documentation package is an industry standard used to convey technical details beyond the scope of the presentation, including detailed schematics, mechanical drawings, GUI details, detailed block diagrams and flow charts, code, etc. Check with your PA to determine what he/she expects in the documentation package. The documentation package is NOT a report. It is an orderly compilation of graphical information, data sheets, invoices, etc.

Presentation Requirements

- Presentation must be created in PowerPoint or similar presentation software
- Each member of the group must present a non-trivial aspect of the design
- Presentations must not exceed the time limit specified by your project advisor (you will be cut off)
- **Business casual attire at a minimum is required**
- Each presenter will be graded on content delivery, eye contact, stance and posture, voice projection, and appropriate attire. The group and individual evaluation forms are posted on the course website.

PowerPoint Requirements

- Avoid "text heavy" slides; don't clutter every square inch of the slide
- Every slide should have a descriptive heading. No two slides should have the same heading, so avoid "Technical Approach, Cont."
- All figures, tables, diagrams, etc. must be large enough so that the details are clear and the labels are legible
- Spelling errors and typos are unprofessional and should be avoided
- All bulleted items should be parallel in structure (same verb tense, for instance)
- There is no slide minimum or maximum. Each team has 10 minutes to present. As long as you stay within the time limit, the slide count doesn't matter.

Organizing Your Content: Using the Story Board Method

Title Slide

Project Overview

Design Objectives

Illustration of Design

Current Status

Discussion of Your Design

Specific Problems

Schedule/Timeline/Relevant Dates