

Design Review 1 Recommended Guidelines

Special Note

Be creative! Have fun!

You are allowed to change the recommended guidelines if the change can help Judge Panel better understand your presentation and you believe you are on the right track in terms of project progress.

General Objectives

- Determine the level of understanding of the design problem and needs.
- Document progress to date and the relevant available literature.
- Establish customer requirements and engineering specifications.
- Develop multiple conceptual designs using methods taught.
- Determine whether a good, well thought out concept has been developed.
- Develop a first design that can be evaluated rigorously for engineering feasibility (**optional**)
- Evaluate the basic project plan.

Requirements

- Format: Oral presentation given by all team members.
- Place: JI 310
- Time: June 24 (Monday Night), 6:20pm to 8:00pm
- Submission: Each team should submit an e-copy of your slides to Canvas by 11:59 pm of June 24

Oral Presentation

The teams are expected to present the needs and an overall understanding of their projects. Present the customer requirements as you understand them and relevant benchmarks. Engineering specifications should be established using the QFD method. The specifications should be solution neutral (i.e., the specifications don't suggest a particular solution). The team is required to demonstrate some initial conceptual ideas. Describe any difficulties that you foresee in achieving your goals.

The oral presentation will be confined to **12 minutes, including 9 minutes for your presentation and 3 minutes for Q&A**. 9 minutes will only be enough time if you are prepared, so be sure to have organized the presentation and rehearsed it in advance.

The team will be graded as a whole. Everyone should present in design review and the presentation load needs to be distributed evenly.

It is suggested to have the following items

- Project Title
- Team Roles and Individual Introductions
- Review of Design Problem
- Literature Search and Benchmarking

- Quantification of Design Specifications
- Multiple concepts
- Initial design selected from multiple ideas (optional)
- Project Schedule
- Q&A

Keys to a Great Design Review

- Think about your audience. Use visual aids if necessary to help audience understand.
- Organize your reports logically and be concise. The ability of expressing ideas clearly will also be graded.
- Failure is part of the process, so do not gloss problems over. Be technical and quantitative.
- Do not be defensive or abrasive. Professionalism is observed and contributes to your participation grade.

Grading Criteria

Main Category	Sub-items	Weight
Conceptual Design (70%)	Literature Search and Benchmarking	10%
	QFD and Quantification of Design Specifications	10%
	Quantity of initial concepts	25%
	Novelty of initial concepts	15%
	Project Schedule	10%
Oral Performance (30%)	Ability to present the problem and ideas clearly	20%
	Quality of the PPT slides	10%
Sum		100%