

**2.372J/6.777J Design and Fabrication and Microelectromechanical Devices
Spring Term 2007**

Design Problem Reports

Preliminary Report (Lecture 17)

This is a **1-2 pg** brief outline of

- the major challenges in the project, as seen by the team
- the fundamental approach (e.g., a piezoresistive bulk-micromachined accelerometer)
- which tasks are assigned to which team members, along with a rough timeline

This report only needs to be shared with the project mentor, not the entire teaching staff. Email of MS WORD or PDF documents is fine.

Interim Report (Lecture 22)

This is a **2-5 pg** more in-depth analysis summarizing the progress to-date and what the endgame is for the team to finish the design by mid May. Identify outstanding issues and how the team will solve them. This report only needs to be shared with the project mentor, not the entire teaching staff. Email of MS WORD or PDF documents is fine.

Final Presentations (5 days after Lecture 25)

During the day (times are TBA) each team will give a talk and answer questions from the audience and a panel of independent judges. Total time including questions will be 30-min/team, and this will be strictly maintained. After all the talks, an award is given to the best presentation. Each team makes ONE presentation—each member can give part of the presentation, or one/two member(s) can give the whole presentation.

Final Report (6 days after Lecture 25, 5 PM *SHARP*)

The final report should summarize the final device, including major design issues, modeling approaches, performance specs, etc. The report should aim for 25-30 pages. Shorter is acceptable. **Longer is not.** Fonts should be at least 10 pt and margins at least 0.75". It is important that the report be coherent and concise—these will affect the grade.

Each team must submit:

- One **Hardcopy** of the **REPORT** to either Joel or Carol.
- One **Electronic version** of the **REPORT in PDF format** and the **PRESENTATION in PDF or PPT** format, either via email, burned to a cdrom, or EASILY downloadable from the web.
- The electronic version is in addition to the hardcopy. Each team **MUST** submit a **PHYSICAL HARDCOPY** upon which we will base the team's grade.
- **Both the hardcopy and electronic versions must be handed in by 5 PM on the due date, no exceptions.**

Grading

Each person's project grade is based on the team's project grade (50%) and that person's individual project grade (50%). The team grade will be based on the physical hardcopy of the final report. It reflects the work of the team as a whole and is the same for each team member. The individual project grade will be assigned based on a peer grading process. At the conclusion of the project (after the final report is complete but before noon 8 days after Lecture 25), each person must send an email to Joel and Carol assigning a letter grade to each of their fellow team members' contributions. An A is a solid team member, and an F is a no show. The instructors will use the results of the peer grading to assign an individual grade to each person. Peer grading

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pacts (for example, “let’s all give each other A’s whether we contributed or not”) are not allowed and will result in each member of the team being assigned a B for their individual team grade.