ME 4054W Design Projects
Spring Semester 2012
End of the Semester Logistics

Prof. David Y. H. Pui
Prof. Brad Bohlmann
April 10, 2012
# Schedule: What’s happening between now and the Design Show

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>Apr 10</td>
<td>Lecture: Course Logistics</td>
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<tr>
<td></td>
<td>Team Meeting</td>
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<td>Apr 12</td>
<td>Team Meeting</td>
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<td>Apr 17</td>
<td>Team Meeting</td>
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<td><strong>Due:</strong> Design Evaluation <em>(Design Report Assessment #4 - Supporting documents for Design Evaluation are not due at this date just Volume I)</em></td>
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<td>Apr 19</td>
<td>Lecture: The Design Show</td>
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<td>Team Meeting</td>
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<td>Apr 24</td>
<td>Lecture: Systems Engineering (Rob Schaller)</td>
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<td>Team Meeting</td>
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<td>Apr 26</td>
<td>Team Meeting</td>
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<td><strong>Due on Monday, April 30:</strong> Final Design Report <em>(Design Report Assignment #5)</em></td>
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<td>May 1</td>
<td><strong>Design Show!</strong> (Coffman Union Great Hall, Open to public 2-5 PM)</td>
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<td><strong>Due:</strong> Design Notebook (give to advisor at Design Show)</td>
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<td>May 3</td>
<td>Relax!</td>
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<td><strong>Due:</strong> Peer Evaluation (All)</td>
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Important Dates

• 4/17  Evaluation Chapter Draft Due
• 4/19  Lecture on the Design Show
• 4/30  Final Design Report Due
• 5/1   Design Show
• 5/3   Peer Evaluation (All)
Resources

• Assembly space: ME 388
• Rapid prototyping: allow at least 1 week
• Equipment available for loan: data acquisition boards
• DFE tutorial
• Shop hours:
  – M: 7:45-12, 12:30-4:15
  – T: 12:30-5:00
  – W: 12:30-5:15
  – Th: 12:30-6:00
  – F: 12:30-4:15
Purchasing: What to do if you have project expenses

• If project is sponsored by a company:
  What does the course pay for:
  – Copies?
  – Cost for your design show display?
  – Supplies or materials for building your prototype?
  **NONE**

• When will a project team be reimbursed for up to $100?

  **Check with your advisor in advance**
Prototyping

• Is there a limit to the part size?
• How many RP parts can be made?
• What is the lead time that you should allow?

See http://me.umn.edu/intranet/rapid/

Find details at Course website -> resources
Final Design Report

- There is a 30 page limit on Volume I.
- Contributions Page: to document the specific and significant contributions made by each student.
- Teams are required to provide a printed version of Volume I and Volume II (two separate bound documents) and a CD, DVD, or USB drive containing both to Tori Piorek at the check-in table at the Design Show.
- An electronic copy (not printed copy) should be provided to the advisor.
3.1 Evaluation Reports
This section contains the research reports that validate the design criteria. Every design criteria listed in Volume I is explicitly evaluated. The evaluation reports from Volume I are simply the abstracts from these evaluation reports.

For each report, have an introduction, method, results, and discussion section. If the same apparatus or method is used to evaluate different criteria, there is no need to re-describe your previous explanation.

3.3 Environmental Impact Statement
This section outlines the impact your design has on the environment. Every design impacts the environment in some way. Read the design for environment webpage for more info: http://www.me.umn.edu/dfe/.

An environmental impact statement has four main parts: purpose and need, impact to environment, alternatives to design, and discussion.

3.4 Regulatory and Safety Considerations
Hazard analysis matrix