ME 4054W Design Projects
Fall Semester 2010
Course Logistics

Prof. Thomas Kuehn
September 7, 2010

Resources

- Instructor and course coordinator:
  Prof. Thomas Kuehn, ME 3031C, (612) 625-4520, kuehn001@umn.edu
- Teaching Assistant:
  David Lunde, (612) 968-2936
- Administrator:
  Tori Piorek, ME 2101, (612) 625-6808
- Information regarding office hours and other resources can be found on the course web site
Course Objective

- This class is the capstone design class. It is called "capstone" because it draws on all of your other engineering courses.
- You will go through an open-ended design project experience similar to what you can expect on your job, following graduation.
- The lecture series will present a process which will enable you to identify the optimal solution to such open-ended problems.

Structure

- The course web site is at: [http://me.umn.edu/education/courses/me4054/](http://me.umn.edu/education/courses/me4054/)
- The class meets as a whole for the lectures shown on the schedule. You are expected to attend each class meeting.
- The bulk of the course work, however, is focused on your design project. The majority of the time on the class schedule, plus time outside class, is spent working on your project.
Project Teams

• Most of the work in this course will be performed as part of a team assigned to a specific project. Teams are typically four to six students and one or two advisors.
• There are 15 total projects and descriptions posted on the class web site.
• You express your ranked project preferences on an online form.
• Students are assigned to teams by the course staff based on preference. You will generally get one of your top choices, but even if not, you will be on a good project.

Grading

• The criteria for assessment of the team are:
  – Final report/design \textit{advisor and course instructors} 25%
  – Design Documentation \textit{course instructors} 20%
    • includes intermediate reports such as problem statement, design description, evaluation plan, appendices
  – Oral presentations/communication \textit{course instructors} 15%
    • site visits, mid presentation, final design show
  – Project Plan \textit{advisor} 10%
    • SOW, WBS, Gantt chart, Design requirements

70\% of your grade is based on team performance
Grading

• The criteria for assessment of individuals within the team are:
  – Knowledge of the design process  course instructors  15%
    • Midterm exam
  – Assessment of design notebook  advisor  10%
  – Individual contribution  advisor, course instructors, peers  5%
    • Google site, peer reviews, observations during semester

30% of your grade is based on your individual performance

Schedule

May change during semester; on-line version is always the most current
Assignment # 1

• Go to the course web site and use the online form to make your preferred project selections.
• Complete and submit the online project selection form by 11:59 AM on Wednesday, September 8, 2010.
  You will learn your project assignment and meet with the project advisor at the second class meeting on Thursday, September 9.
• Bring 6 copies of your resume to Thursday’s class.