

**ME340 Course Schedule - Spring 2008 Section 4 T TH 12:20-2:15-H. Perez-Blanco/
Office Hours Office Hours: MW 4:00-5:00, Th 3:30-5:00**

	Date	Topics	Activity	Items due	Reading to be completed <u>before</u> this class	Notes to Instructor
1	1/15	Course Introduction, The Design Process	Introductions, assign team survival problem, Gossamer Condor video and discussion			Assign survival problem, bring blank manila folders
2	1/17	Team Skills	Team Workshop - Team solution to team survival problem. Team assembly and organization: roles.	Bring journal to class, manila folders w/ name and picture, individual solution to team survival problem and completed Team Assemblage to class.	Ch 1	Discuss Project 1 with class
3	1/22	Learning Factory Tour	Tour and safety briefing, sign up for machining class		Ch 1	
	1/22	Solid Modeling (1 team member ea., 7-9 pm, 315 Hammond)	Solidworks Workshop TBA		SolidWorks Handout (Angel)	
4	1/24	Reverse Engineering, Dimensioning, Tolerancing	Quiz 1 (Ch 1, syllabus), Project 1- Bracket reverse engineering	Complete LF safety certification, Hand sketch of bracket (in journal),	Ch 1	1. Assign Project 1 2. Assign SW Ex. 1-6
5	1/29	Development Processes and Organizations (Ch 2), IP and Patents (Ch 14)	Ch 2,14 Quiz2, Hoover video, Discuss Hoover vs Dyson patent case,	Bracket CAD drawing hardcopy (individual)	Ch 2, Ch 14	
6	1/31	Drawings and Dimensions	Review and correct CAD drawings, compare to mating part,	SW exercise 1, 2, Submit corrected final drawing for team by 5 pm tomorrow to ANGEL dropbox		
7	2/5	Industrial Design (Ch 10), rapid prototyping	Ch. 10 Quiz3, washing machine video and discussion, disposable shaver ID assessment	SW exercise 3, 4	Ch 10	Assign Project 2 , bring RP samples
8	2/7	Customer Needs and Product Specifications (Ch 4,5)	Ch 4,5 Quiz4, Simpson's video, in-class inspection of design journal, determine customer needs for Project 2	Design journal	Ch 4,5	Team Checkup 1 Assign external search for Project 2
9	2/12	Concept Generation (Ch 6)	Concept generation exercise, Project 2 - Consumer Product Design-Session 1	Project 2- external search of design concepts and patent search results (in journal)	Ch 6	
10	2/14	Concept Selection (Ch 7)	Ch 6, 7 Quiz5, Consumer Product Design-Session 2	SW exercise 5, 6	Ch. 7	Assign ethics HW
11	2/19	Ethical Issues in Design, Technical Writing Review	Ethics case study, technical writing guidelines	LF machining class completed, HW - Ethics in the news (in journal)	Technical writing handout	
12	2/21	Project 2 presentations	Team presentations for consumer product design	Project 2 - 6 minute oral presentation		
13	2/26	Project 1 Part Inspection	IDEO Video, Mating of bracket pairs,	Project 1 memo report and completed bracket half		
14	2/28	Black and Decker Case,	Ch 11 Quiz6, Dewalt video,	Project 1 inspection report,	Ch. 11	Assign Project 3

		Benchmarking	Discussion of video	Project 2 written proposal		
15	3/3	Midterm exam (evening)	Time and place TBD	Design journals collected		Collect journals

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	Date	Topics	Activity	Items Due	Reading	
16	3/6	Drill Dissection	Project 3- Drill Dissection session 1			Assign Project 4
		Spring Break (3/10-14)				
17	3/18	Drill Dissection	Drill Dissection sessions 2 and 3	Team Checkup 1		
18	3/20	DFM/A	Drill Dissection Quiz7, DFM activity	Project 3 memo report	Project 4 description	
19	3/25	Project Management (Ch 16)	Ch.16 Quiz8 , Planning of Project 4, MS Project		Ch. 16	Assign project scoping HW (in journal)
20	3/27	Project Specific Lecture	Topic TBD, Expectations of technical writing for project 4	Project 4 Progress memo 1, Project scoping HW (in journal and append to memo 1)		
21	4/1	Motor Selection	Quiz9 (Motors), dissection and/or testing related to project 4		Motors handout (Angel)	
22	4/3	Project 4	Team meetings with instructor	Progress memo 2		
23	4/8	Economic Analysis (Ch 15)	Ch.15 Quiz10, Economic analysis for project 4	Bring laptop to class, one per team	Ch. 15	
24	4/10	Project 4	Team meetings with instructor, Project 4 – Build/Test	Design Proposal, Progress memo 3, Team Checkup 2		Team Checkup 2
25	4/15	Effective Technical Presentations (M. Alley)	Plan team oral presentation for Project 2	All RP jobs submitted		
26	4/17	Project 4	Team meetings with instructor, Feedback on Design Proposal	Progress memo 4		
27	4/22	Project 4	Project 4 – Build/Test	Detailed Design Report		
28	4/24	Project 4, Design of Posters	Project 4 - Preliminary testing Poster design workshop	Functioning system, Progress memo 5		
29	4/29	Project 4, Feedback on Detailed Design report	Project 4 – Rebuild/Re-test, Feedback on Detailed Design report Executive summary workshop			
	TBD	Project competition	Evening			
30	5/1	Last Class Meeting	Reflection on project and course	Final project report, design journal, peer evaluation		Assign Peer Evaluation