Exact dates and topics subject to change
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RED- Team Project Assignments

Session	DATE	Topic	Class activity	Assignment	Hand-in
1	Jan 22	Introduction to course, the design process, where do new products come from?	Exercise in ideation- dry run: how to weigh your head	Dorm Poster	
2	Jan 27	SCAMPER Project List	SCAMPER on skateboard, dishwasher	SCAMPER list for dishwasher	Dorm Drawing
3	Jan 29	Engineering Design Process	Present SCAMPER DW in class Choose Project, BREAK INTO TEAMS	Select project and write problem definition.	SCAMPER list for dishwasher
4	Feb 3	Prototyping	Team project Discuss Problem Definition SCAMPER project	SCAMPER project	Project Definition Draft
5	Feb 5	Reverse Engineering	Present SCAMPER for project Determine Critical Path	Morph/Pugh charts- critical path	Final Project Definition+ SCAMPER
6	Feb 10	Injection Molding, 3D printing		3D cord organizer	Morph/Pugh Critical Path
7	Feb 12	Sheet Metal and Machining	Critical Path Readout		
8	Feb 18	Gibbscam in B05, bring laptop, use citrix	3D cord organizer should be submitted to printers by today	Whistle	

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9	Feb 19	Materials Selection	Demo Soft Prototypes		
10	Feb 24	Adhesives Good vs Bad Design Overview			
11	Feb 26	Form as a Material		James Bond	Cord organizer
12	Mar 2	Mechanisms I			
13	Mar 4	Costing	Critical Path Demos	Calculate manufacturing cost of one or two parts in final project	
SPRING BREAK					
14	Mar 16	Mechanisms II			
15	Mar 18	CREO 4 BAR Creo Gears and Belts, more 4Bar		4-bar mechanism	James Bond
16	Mar 23	Interim project presentation	Demo your whistles		Calculate manufacturing cost of one or two parts in final project Whistles
17	Mar 25	CREO structures	Last chance to modify design Build time		

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Session	DATE	Topic	Class activity	Assignment	Hand-in
18	Mar 30	Arduino I—Digital IO	Build Time	In-class circuits	
19	Apr 1	Arduino II- Analog IO		In-class circuits	
20	Apr 6	Arduino McGyver			4-bar mechanism (last individual assignment)
21	Apr 8	Thermal properties James Bond Solution			
22	Apr 13	Design for Manufacturing	Build Time		
23	Apr 15	Practical Quality Control M&M QC Experiment	Build Time		
24	Apr 22	CREO Thermal analysis 4 bar Assignment Feedback Project Presentation and Paper Guidelines	Build Time		

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Session	DATE	Topic	Class activity	Assignment	Hand-in
25	Apr 27	Intellectual Property- the short version Course evaluations	Maybe build time		
	TBD	Retirement Planning			
26	Apr 29	Project presentation with FINAL prototypes in class	Chance to incorporate project feedback into final report		Final project report submitted- paper and online