Engin 103	Topics:	
October 11, 2011	Project 1 -Part I Presentations	
	Logbook questions	
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Project 1 Part I Presentation	s: Design for System Predictability	

Project 1 leaders: please copy this page and fill in your team response below. Then save as a web page: name "p1p1.html" and upload to your ftp *files* folder.

## Section 1 (9:30 AM)

Team #	Picture of system *If you took a picture of the system you can insert it here, otherwise leave it blank, we will take care of it.	<ul> <li>a) System name</li> <li>b) What are the input X and output Y along with their units</li> </ul>	<ul> <li>c) How did your design make sure the system can produce at least 10 pairs of distinctive values for X and Y</li> <li>d) How did your design reduce to a minimum any uncertainty in the system so to increase its predictability</li> </ul>	<ul><li>e) What mathematical models may we system using the Spreadsheet?</li><li>f) Which model you think will best de system, why?</li></ul>
<b>1</b> section 1			1	
<b>2</b> section 1				
<b>3</b> section 1			a)	b)
<b>4</b> section 1				
5 section 1				
<b>6</b> section 1				
<b>7</b> section 1				
<b>8</b> section 1				
9 section 1				
10 section 1				

Feam #	Picture of system *If you took a picture of the system you can insert it here, otherwise leave it blank, we will take care of it.	a) b)	System name What are the input X and output Y along with their units	c) d)	How did your design make sure the system can produce at least 10 pairs of distinctive values for X and Y How did your design reduce to a minimum any uncertainty in the system so to increase its predictability	e) f)	What mathematical models may work for this system using the Spreadsheet? Which model you think will best describe the system, why?
<b>1</b> section 2							
<b>2</b> section 2							
<b>3</b> section 2				i)		j)	
<b>4</b> section 2							
5 section 2		a)				b)	
<b>6</b> section 2							
<b>7</b> section 2							
<b>8</b> section 2							
9 section 2							
10 section 2							

Report for team # Submitted		On time	Late
Uploaded electronic cop	)y	Yes	No
Project 1 web page	¥	Yes	No
Team participation table		Yes	No
<b>`</b>	Progress Report:		
Report submitted (80)	p1pr.html (5)		
	p1p1.html (5)		
	p1p2.html (5)		
	Introduction (10)		
	Design/Building (25)		
	Analysis: Spreadsheets		
	(20)		
	Conclusions (10)		
Good writing practices	Grammar and		
(20)	presentation (5)		
	Logical arguments and		
	structures (5)		
	Accurate,		
	completeness; non-		
	plagiarism (10)		
Deduction	\ \		
Project report total (100		Doutours on on a D	(190)
Project presentation tota	li (200)	Performance and D	-
$D_{\text{resident } 1 \text{ total } (200)}$		Web pages Parts I a	and II (20):
Project 1 total (300)			

Project 1 -part I P&D/ Teams	1	2	3	4	5	6	7	8	9	
	Hoist	Free Fall	Flexiglass Catapult	Marble Ramp	Fulcrum	Free Fall	Ball Ramp	Trebuchet Swing	The Ogre	
Project completed (35)	35	35	35	35	35	35	25	35	35	
Design for predictability (15)	15	15	14	15	14	12	10	15	14	
Performance& readiness (25)	25	23	24	25	24	24	17	22	23	
Presentation (15)	15	14	14	14	14	13	13	13	13	
Total part I P&D (90)	90	87	87	89	87	84	65	85	85	
Section 2	90									 
	90 1 Catapult	87 2 The Ramp	87 3 Water Bottle Pulley	89 4 The Trap	87 5 Car Launcher	84 6 Maarble Ramp	65 7 Ball Ramp	85 8 Catapult	85 9 Bow & Arrow	
Section 2	1	2 The	3 Water Bottle	4	5 Car	6 Maarble	7 Ball	8	9 Bow &	Mou p Ca
Section 2 Project 1 -part I P&D/ Teams	1 Catapult	2 The Ramp	3 Water Bottle Pulley	4 The Trap	5 Car Launcher	6 Maarble Ramp	7 Ball Ramp	8 Catapult	9 Bow & Arrow	
Section 2 Project 1 -part I P&D/ Teams Project completed (35)	1 Catapult 35	2 The Ramp 35	3 Water Bottle Pulley 35	4 The Trap 35	5 Car Launcher 35	6 Maarble Ramp 35	7 Ball Ramp 35	8 Catapult 35	9 Bow & Arrow 33	
Section 2 Project 1 -part I P&D/ Teams Project completed (35) Design for predictability (15)	1 Catapult 35 13	2 The Ramp 35 14	3 Water Bottle Pulley 35 15	4 The Trap 35 14	5 Car Launcher 35 13	6 Maarble Ramp 35 15	7 Ball Ramp 35 12	8 Catapult 35 14	9 Bow & Arrow 33 12	

Project 1 -part I P&D/ Teams	1	2	3	4	5	6	7	8	9	10
	1		3	•		0	,			10
Project completed (35)										
Design for predictability (15)										
Performance& readiness (25)										
Presentation (15)										
Total part I P&D (90)										
Project 1 -part II P&D/ Teams		1	2	3	4	5	6	7	8	9 10
Percentage error										
Project completed (35)										
Spreadsheet and data modeling (15)										
System predictability (25)										
Presentation (15)										
Total part II P&D (90)										
<u>pack</u>										
<u>pack</u>										
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LOGBOOK: example of a logbook page	

-Use a quadrille notebook; number all pages; date all entries

-Write your notes for all activities, thoughts, problems and solutions, and learning conclusions related to Engin 103. You should write down progress, outcomes, and conclusions on projects and teamwork; conclusions from class work (including LabVIEW) and homework.

-In addition you should answer in the logbook all questions listed in these notes in blue, as shown below:

25) Sketch the system built by your team, describe the input and output variables on the sketch. What units will you measure these variables, and with what instruments.

26) Explain with a sketch the different design elements your team used to increase predictability. Explain what mathematical model will be the best to describe the system using the X and Y variables mentioned in the previous question.

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