LECTURE/LAB CALENDAR

Lecture			Reading (to be completed before the lecture)	Out	Due
0 Course Introduction What's A Microprocessor ?	Wed.	05/Jan/2011	CKO Ch. 9, 10, 11 (Basic Electronics Review) CKO Ch. 1, 2, 3, 4 (Basic Software Review)	Lab 0	Pre-Lab 0 due Friday, 07/Jan
1 Event Driven Programming	Fri.	7/Jan/2011	CKO Ch. 4, 5, 6 (Programming Review and Software Structures).		
2 Sensors	Mon.	10/Jan/2011	CKO Ch. 11, 12, 13, 14 H&H Sections 9.10, 15.02-15.05, 15.10 (skim all of 15), Rorabaugh Ch. 2	Lab 1	
3 Filtering	Wed.	12/Jan/2011	CKO Ch. 14, 15	Lab 2	Lab 0 Pre-Lab 1, Th
4 OpAmps (real ones)	Wed.	19/Jan/2011	CKO Ch. 11, 12, 13, 14, 15 H&H Sections 4.01-4.09 (4.10-4.26 skim)		Lab 1 Pre-Lab 2, Th
5 Mechanical CAD	Fri.	21/Jan/2011	CKO Ch. 29, Corel Draw tutorials available at: http://www.webreference.com/graphics/corel101/		
5 Rapid Prototyping & Statics	Mon.	24/Jan/2011	Course Notes: *Fabulous Foamcore, Forces, Moments, and Free Body Diagrams.*	Lab 3	
6 Digital Inputs, Outputs & Power Drivers	Wed.	26/Jan/2011	CKO Ch. 16, 17 H&H Sections 9.02, 9.03, 9.04, 8.1-8.11, 8.16-8.19		Lab 2 Pre-Lab 3, Th
7 Solenoids and DC Motors	Mon.	31/Jan/2011	CKO Ch. 22, 23, 24 Rorabaugh: Ch. 3 & 6		
8 Stepper Motors	Wed.	02/Feb/2011	CKO Ch. 25, 26 Rorabuagh Ch. 5	**Mid-Term & Project**	Lab 3 **Mid-Term (Sun)**
9 A/D, D/A, Timers	Mon.	07/Feb/2011	CKO Ch. 18, 19 H&H Sections 9.15-9.26	Team Lists	
10 Mechanical Components	Wed.	09/Feb/2011	Course Notes: *1.2 Materials* Rorbaugh Ch 7 & 8,		Preliminary Designs
11 Project Planning and Organization	Mon.	14/Feb/2011	CKO Ch. 30, 31, 32		
12 Design Review	Wed.	16/Feb/2011	No Reading, but be prepared to present your preliminary project design ideas		

13 Wed. 23/Feb/2011 Modular Software Design in C	CKO Ch. 6, Course Notes: *4 Steps in Building a Routine*, and *Characteristics of High-Quality Routines*		
14 Fri. 25/Feb/2011 Noise, Grounding & Isolation	CKO Ch. 21 H&H Sections 7.11, 7.23-7.25, 9.10(Opto-Couplers and Relays)		
15 Mon. 28/Feb/2011 HLL, Interpreters, Compilers & Assembly Language	CKO Ch. 4		
16 Wed. 02/Mar/2011 Project Preview	Be prepared to demonstrate the 'Project Preview' level of functionality for your project.	Project Preview	
17 Mon. 07/Mar/2011 Communications, Serial & Otherwise	CKO Ch. 7 H&H p719 -736		
18 Wed. 09/Mar/2011 Project Review	Bring your finished project to class for an up-close review by the other members of class and teaching staff.	Project Demo!!	Demo (Wed.)
19 Mon. 14/Mar/2011 Course Review, evals, feedback	None		Project Report Lab Cleanup

Note: due to the instruction starting on Tuesday, and two holidays on Mondays, we are having three make-up lectures on the corresponding Friday of each of those weeks. These are mandatory unless you have another class scheduled on top of them. Location and exact times will be announced on the website and in lecture.

LAB DESCRIPTIONS

Number	Material	Pre-Lab Due Date	Lab Due Date
Lab 0	Event Driven Programming: The Cockroach	07/Jan/2011	12/Jan/2011
Lab 1	Analog Signal Conditioning, Filtering	13/Jan/2011	19/Jan/2011
Lab 2	FoamCore, Mechanical, and Electronic Prototyping	20/Jan/2011	26/Jan/2011
Lab 3	DC & Stepper Motors	27/Jan/2011	02/Feb/2011

PRESENTATIONS

Project   Public presentation, 09-Mar-2011. Guests are welcome.   Location: TBD

EXAMINATIONS

Quizzes will be given at unannounced and irregular intervals during the quarter (expect one per week on reading material)

Midterm   Take Home, Out on Thursday, 03/Feb/2011 after review session, Due Sunday, 06/Feb/2011 by 5PM.
                 Review Session will be on Thursday, 03/Feb/2011, Time: 7:00pm, Location TBD.