ECE 410 Course Outline Spring 2007

#	Date	Day	Topic	Reading	HW/Lab
1	1/8/07	Mon	Intro, Syllabus, VLSI Design Flow	Ch 1	
2	1/10/07	Wed	MOSFETs, ideal switches, switch logic	2.1-2.2	
3	1/12/07	Fri	CMOS Inverter, NAND, NOR	2.3	
	1/15/07	Mon	Holiday -No Class		
4	1/17/07	Wed	Complex CMOS Gates, XOR, TGs	2.4-2.5	
5	1/19/07	Fri	CMOS Technology & Layers, *Lab Reports*	3.1-3.3	Lab1 c/o
6	1/22/07	Mon	Gate Layout, Design Rules	3.4, 4.5	Lab1 br-rpt
7	1/24/07	Wed	CMOS Fabrication	4.1-4.3	HW 1
8	1/26/07	Fri	CMOS Process Flow	4.4, notes	Lab2 c/o
9	1/29/07	Mon	Multi-gate Layout, Stick Diagrams	5.1-5.2	Lab2 br-rpt
10	1/31/07	Wed	Layout Techniques, Standard Cell Concept	5.3-5.6	HW 2
11	2/2/07	Fri	Top-Down Design	notes	Lab3 c/o
12	2/5/07	Mon	Semiconductor Physics	notes	Lab3 br-rpt
13	2/7/07	Wed	MOSFET Physics, I-V eqns, pMOS	6.1-6.4	HW 3
14	2/9/07	Fri	MOSFET RC Model, CMOS Capacitances	6.3	Lab4 c/o
15	2/12/07	Mon	Inverter DC & Transient Analysis	7.1-7.2	Lab4 br-rpt
16	2/14/07	Wed	Inverter Speed and Power Dissipation	7.3	HW 4
17	2/16/07	Fri	NAND/NOR Analysis	7.4-7.5	Lab5 c/o
18	2/19/07	Mon	Gate Design/Analysis, Pass Gates	7.6-7.8	Lab5 br-rpt
19	2/21/07	Wed	Examples and Exam Review		HW 5
	2/23/07	Fri	**Exam 1**		
20	2/26/07	Mon	exam review, *TEAMS, Mid-Term Evaluation*		
21	2/28/07	Wed	Multi-cell Layout, Inter-cell Routing	notes	HW 6
22	3/2/07	Fri	Multiplexers, Decoders, Shifters	11.1-.5	Lab6 c/o&rpt
	3/5/07	Mon	*SPRING BREAK*		
	3/7/07	Wed	*SPRING BREAK*		
	3/9/07	Fri	*SPRING BREAK*		
23	3/12/07	Mon	Latches and Flip Flops, Tri-States, C2MOS	11.6-.7	
24	3/14/07	Wed	Counters, Logic Design Methods	11.8	HW 7
25	3/16/07	Fri	*Course/Lab Issues, Design Project Intro*		Lab7 c/o
26	3/19/07	Mon	Adders	12.1-12.2	Lab7 tm-rpt
27	3/21/07	Wed	Adders	12.3-12.4	HW 8
28	3/23/07	Fri	Arithmetic Circuits, ALUs	12.5	DP prop. c/o
29	3/26/07	Mon	Memory Basics, SRAM Cells	13.1	DP proposal
30	3/28/07	Wed	SRAM Arrays	13.2	HW 9
	3/30/07	Fri	DP check, no lecture		Lab8 c/o
31	4/2/07	Mon	DRAM & other memories	13.3	
32	4/4/07	Wed	Differential and Dynamic Logic	notes	HW 10
	4/6/07	Fri	DP check, no lecture		Lab9 c/o
33	4/9/07	Mon	Submicron Design	notes	
34	4/11/07	Wed	Exam Review & Examples	notes	
	4/13/07	Fri	**Exam 2**		
35	4/16/07	Mon	exam review, design project issues	notes	
36	4/18/07	Wed	advanced VLSI projects; careers	notes	
	4/20/07	Fri	DP check, no lecture		Lab10 c/o
	4/23/07	Mon	lab day, no lecture		DP demo
	4/25/07	Wed	DP check, no lecture		DP demo
	4/27/07	Fri	Engineering Design Day, no lecture		
	5/3/07	Thur	Final project reports due. 12-noon		DP report