

ECE 410			Course Outline	Spring 2008	
#	Date	Day	Topic	Reading	HW/Lab
1	1/7/08	Mon	Intro, Syllabus, VLSI Design Flow	Ch 1	
2	1/9/08	Wed	MOSFETs, ideal switches, switch logic	2.1-2.2	
3	1/11/08	Fri	CMOS Inverter, NAND, NOR	2.3	
4	1/14/08	Mon	Complex CMOS Gates, XOR, TGs	2.4-2.5	
5	1/16/08	Wed	CMOS Technology, <i>Lab Reports</i>	3.1-3.2	
6	1/18/08	Fri	CMOS Layers & Gate Layout	3.3-3.4	
	1/21/08	Mon	Holiday -No Class		
7	1/23/08	Wed	CMOS Process Flow	4.4, notes	HW 1
8	1/25/08	Fri	Design Rules	4.5	Lab1 c/o
9	1/28/08	Mon	CMOS Fabrication	5.1-5.2	Lab1 br-rpt
10	1/30/08	Wed	Complex Gate Layout, Stick Diagrams	4.1-4.3	HW 2
11	2/1/08	Fri	Layout Techniques, Hierarchical Design	5.3-5.6	Lab2 c/o
12	2/4/08	Mon	Semiconductor Physics	notes	Lab2 br-rpt
13	2/6/08	Wed	MOSFET Physics	6.1-6.2	HW 3
14	2/8/08	Fri	MOSFET I-V eqns, pMOS	6.4	Lab3 c/o
15	2/11/08	Mon	MOSFET RC Model, CMOS Capacitances	6.3	Lab3 br-rpt
16	2/13/08	Wed	Inverter DC & Transient Analysis, <i>Exam Review</i>	7.1-7.2	HW 4
17	2/15/08	Fri	Exam 1		
18	2/18/08	Mon	Inverter Speed and Power Dissipation	7.3	
19	2/20/08	Wed	NAND/NOR Analysis and Exam Review	7.4-7.5	HW 5
	2/22/08	Fri	Gate Design/Analysis, Pass Gates	7.6-7.8	Lab4 c/o
20	2/25/08	Mon	Exam discussion, <i>Teams, Mid-Term Evaluation</i>		Lab4 br-rpt
21	2/27/08	Wed	Multi-cell Layout, Inter-cell Routing	notes	HW6
22	2/29/08	Fri	Multiplexers, Decoders, Shifters	11.1-.5	Lab5 c/o&rpt
	3/3/08	Mon	<i>SPRING BREAK</i>		
	3/5/08	Wed	<i>SPRING BREAK</i>		
	3/7/08	Fri	<i>SPRING BREAK</i>		
23	3/10/08	Mon	Latches and Flip Flops, Tri-States, C2MOS	11.6-.7	
24	3/12/08	Wed	Counters, Logic Design Methods	11.8	HW 7
25	3/14/08	Fri	<i>Course/Lab Issues, Design Project Intro</i>		Lab6 c/o
26	3/17/08	Mon	Adders	12.1-12.2	Lab6 tm-rpt
27	3/19/08	Wed	Adders	12.3-12.4	HW 8
28	3/21/08	Fri	Arithmetic Circuits, ALUs	12.5	Lab7 DP proposal c/o
29	3/24/08	Mon	Memory Basics, SRAM Cells	13.1	Lab 7 DP proposal
30	3/26/08	Wed	SRAM Arrays	13.2	HW 9
	3/28/08	Fri	DP check, no lecture		Lab8 c/o
31	3/31/08	Mon	DRAM & other memories	13.3	
32	4/2/08	Wed	Differential and Dynamic Logic	notes	HW 10
	4/4/08	Fri	DP check, no lecture		Lab9 c/o
33	4/7/08	Mon	Submicron Design	notes	
34	4/9/08	Wed	Exam Review & Examples	notes	
	4/11/08	Fri	Exam 2		
35	4/14/08	Mon	exam review, design project issues	notes	
36	4/16/08	Wed	advanced VLSI projects; careers	notes	
	4/18/08	Fri	DP check, no lecture		Lab10 c/o
	4/21/08	Mon	lab day, no lecture		DP demo
	4/23/08	Wed	DP check, no lecture		DP demo
	4/25/08	Fri	Engineering Design Day, no lecture		
	4/30/08	Wed	Final project reports due. 12-noon		DP report