ECE130 Introduction to Logic Design

Tentative course Schedule - Spring 2003-2004

Week	Day	Date	Topic	Recommended Reading	tentative homework assignments
1	Mon	8-Mar	Introduction & switching circuits		1
	Tue	9-Mar	logic expression & turn-signal circuit	1.1-1.3	2
	Thur	11-Mar	in-class combinational circuit lab	1.1-1.3	
	Fri	12-Mar	number systems & 2's complement, binary arithmetic	2	3
2	Mon	15-Mar	binary addition and subtraction	2.4	
	Tue	16-Mar	Simulator tutorial (bring your laptop)	1.7	4
	Thur	18-Mar	Boolean algebra, canonical forms	3	5
	Fri	19-Mar	Boolean algebra, canonical forms	3	
3	Mon	22-Mar	Simplification with Kmaps & don't cares		6
	Tue	23-Mar	Design, NAND-NAND, NOR-NOR	4	7
	Thur	25-Mar	waveforms, delay, Review		8
	Fri	26-Mar	**Test #1**		
4	Mon	29-Mar	Decoders	5.1	9
	Tue	30-Mar	Multiplexers	5.2	10
	Thur	1-Apr	HEX, BCD, adder chip, MSI design	2.5, 5.3, 5.6	
	Fri	2-Apr	Hazards, glitches	5.5	11
Spring Break			April 3 - April 11		
5	Mon	12-Apr	map-entered variables, bus		12
	Tue	13-Apr	review		
	Thur	15-Apr	Introduction to flip-flops	6.1	13
	Fri	16-Apr	**Test #2**		
6	Mon	19-Apr	Sequential Circuit Analysis: D ff example		14, 15
	Tue	20-Apr	Sequential Circuit Analysis: JK ff example	6.1, 6.2	16
	Thur	22-Apr	Simulator Tutorial #2: device symbol		17
	Fri	23-Apr	Sequence detector design	6.3-6.4	
7	Mon	26-Apr	railroad crossing	6.3-6.4	18
	Tue	27-Apr	Counters	7.1	19
	Thur	29-Apr	Shift Registers	7.2	20
	Fri	30-Apr	in-class lab with counter and 7-segment display		
8	Mon	3-May	pop vending machine, project assigned	8	project
	Tue	4-May	stopwatch controller	8	
	Thur	6-May	**Test #3**		group leaders elected
	Fri	7-May	Design Project		
9	Mon	10-May	Design Project		Block Diagram Memo
	Tue	11-May	Design Project		
	Thur	13-May	Design Project		State Diagram Memo
	Fri	14-May	Design Project		
10	Mon	17-May	Design Project		Verification Memo
	Tue	18-May	quarter review		**Project Reports Due**
	Thur	20-May	Project Presentation		
	Fri	21-May	(wiggle room)		
			Final Exam		To be scheduled