

CprE 281: Class Schedule (Fall 2022)

Week	Day/Date	Topic	Readings	Homework	Lab
1	Monday 8/22	Introduction	1.1, 1.2, 1.3, 1.4		No Lab
	Wednesday 8/24	Binary Numbers	1.5, 1.6		
	Friday 8/26	Truth Tables & Logic Gates	2.1, 2.2, 2.3, 2.4		
2	Monday 8/29	Boolean Algebra	2.5	HW 1 due	Lab 1
	Wednesday 8/31	AND, OR, NOT	2.6		
	Friday 9/2	NAND, NOR	2.7		
3	Monday 9/5	NO CLASS: University Holiday			Lab 2
	Wednesday 9/7	Design Examples	2.8	HW 2 due	
	Friday 9/9	Intro to Verilog	2.9, 2.10		
4	Monday 9/12	Karnaugh Maps	2.11	HW 3 due	Lab 3
	Wednesday 9/14	Minimization	2.12, 2.13		
	Friday 9/16	Functions and Circuits	2.14, 2.15, 2.16		
5	Monday 9/19	Examples	2.17	HW 4 due	Lab 4
	Wednesday 9/21	Midterm Review Session			
	Friday 9/23	Midterm #1			
6	Monday 9/26	Addition of Unsigned Numbers	3.1, 3.2	HW 5 due	Lab 5
	Wednesday 9/28	Signed Numbers	3.3		
	Friday 9/30	Fast Adders	3.4, 3.5		
7	Monday 10/3	Multiplication	3.6		Mini Project
	Wednesday 10/5	Floating Point Numbers	3.7		
	Friday 10/7	Multiplexers	4.1		
8	Monday 10/10	Decoders & Encoders	4.2, 4.3	HW 6 due	Lab 6
	Wednesday 10/12	Code Converters	4.4, 4.5		
	Friday 10/14	Latches	5.1, 5.2, 5.3		
	Friday 10/14	* Midterm Grade Reports Due *			
9	Monday 10/17	D Flip-Flops	5.4	HW 7 due	Lab 7
	Wednesday 10/19	T Flip-Flops & JK Flip-Flops	5.5, 5.6, 5.7		
	Friday 10/21	Registers & Register Files	5.8		

Week	Day/Date	Topic	Readings	Homework	Lab
10	Monday 10/24	Counters	5.9, 5.10	HW 8 due	Lab 8
	Wednesday 10/26	Midterm Review Session			
	Friday 10/28	Midterm # 2			
	Friday 10/28	***DROP DEADLINE***			
11	Monday 10/31	Examples with Counters	5.11, 5.14, 5.17	HW 9 due	Lab 9
	Wednesday 11/2	Basic Design Steps	6.1		
	Friday 11/4	State-Assignment Problem	6.2		
12	Monday 11/7	Moore & Mealy Machines	6.3, 6.4	HW 10 due	Lab 10
	Wednesday 11/9	Serial Adder & Arbiter Circuit	6.5, 6.8		
	Friday 11/11	State Minimization	6.6		
	Friday 11/11	PROPOSE FINAL PROJECT			
13	Monday 11/14	Designing a Counter	6.7	HW 11 due	Lab 11
	Wednesday 11/16	Analysis of Syn. Seq. Circuits	6.9		
	Friday 11/18	ASM charts & Examples	6.10 – 6.13		
14	Monday 11/21	NO CLASS: Thanksgiving Break			No Lab
	Wednesday 11/23	NO CLASS: Thanksgiving Break			
	Friday 11/25	NO CLASS: Thanksgiving Break			
15	Monday 11/28	Register Machines		HW 12 due	Work on Final Project
	Wednesday 11/30	The i281 CPU			
	Friday 12/2	i281 Assembly Language			
16	Monday 12/5	Arithmetic Logic Unit & PC			Final Project Demo
	Wednesday 12/7	Software-Hardware Interface			
	Friday 12/9	Assembly Examples			
17	Finals Week 12/14	FINAL EXAM @ 2:15–4:15 pm	everything		No Lab