

COMP251 Schedule

Week	Day	Date	Class number	Topic	Reading required	Review exercises	Homework exercises	work due
1	Tue	8/31	1	Introduction and motivation	-	-	-	
	Thu	9/2	2	History and structure of computers	1.1, 1.2, 1.3, 1.5.6, 1.6, 1.7	r1.21, r1.24	e1.2, e1.5 (brief answer is fine)	
2	Tue	9/7	3	Unsigned whole numbers, and character codes	2.1, 2.2, 2.3.0, 2.3.1, 2.6.3, 2.6.4	r2.3, r2.6, r2.23	e2.4a, e2.11b, e2.12a, e2.28a, e2.30	
	Thu	9/9	4	project 1 discussion	-	-	-	HW1
3	Tue	9/14	5	Signed whole numbers	2.4.0, 2.4.1, 2.4.2 (but skip "One's Complement")	r2.9, r2.12	e2.5c (2's complement only), e2.5d (2's complement only), e2.6c, e2.9b	
	Thu	9/16	6	Floating-point numbers	2.5	r2.16, r2.17, r2.20	e2.19a, e2.25d	
4	Tue	9/21	7	Boolean algebra and logic gates	3.2.0, 3.2.1, 3.3, 3.4	r3.4, r3.8, r3.9	e3.2b, e3.23	
	Thu	9/23	8	Combinational circuits	3.5	r3.12, r3.13	e3.26, e3.28, e3.32 (hint for e3.32: use figures 3.5 and 3.11)	project 1
5	Tue	9/28	9	project 1 peer-review	bring printout of project 1	--	--	
	Thu	9/30	10	Sequential circuits	3.6.0-3, 3.6.5	r3.14, r3.15, r3.19	e3.40, e3.44	HW2
6	Tue	10/5	11	Hardware overview	4.0-4.7	r4.3, r4.10, r4.19, r4.23	e4.4	
	Thu	10/7	12	Assembly language introduction	4.8-4.10	r4.24, r4.26, r4.31	e4.15a	project 2
7	Tue	10/12	13	Assembly language and assemblers	4.11	r4.34	e4.18	
	Thu	10/14	14	Exam 1 (covers classes 1-11)				[Exam 1]
8	Tue	10/19		[Fall Pause]				
	Thu	10/21	15	Subroutines in assembly language	4.12		e4.20	HW3
9	Tue	10/26	16	Assembly language practice	-	-	see webpage for special HW question	
	Thu	10/28	17	Real-world architectures	4.14.0, 4.14.1	r4.39	-	
10	Tue	11/2	18	instruction set design	5.1-5.4	r5.3, r5.4, r5.7, r5.14	e5.2a, e5.14	
	Thu	11/4	19	instruction level pipelining and real-world ISAs	5.5, 5.6.1, 5.6.3	r5.18, r5.24	e5.16	project 3
11	Tue	11/9	20	memory systems and performance	6.1-6.3	r6.1, r6.2, r6.6	-	
	Thu	11/11	21	cache memory	6.4	r6.9, r6.10, r6.13	e6.2, e6.4, e6.7a	HW4
12	Tue	11/16	22	virtual memory	6.5.0-6.5.3	r6.30, r6.36	e6.12	
	Thu	11/18	23	Exam 2 (covers classes 12-21)				[Exam 2]
13	Tue	11/23	24	I/O systems	7.1-7.4	r7.1, r7.6, r7.8, r7.11	e7.2	
	Thu	11/25		[Thanksgiving]				
14	Tue	11/30	25	disk systems	7.6.0, 7.6.1, 7.9.0, 7.9.2, 7.9.6	r7.21, r7.22	e7.19a, e7.19b, + "How many disk failures can a RAID5 system tolerate? Explain."	
	Thu	12/2	26	hardware design project	tecs-ch-1, teCS-appendix-A	--	--	
15	Tue	12/7	27	hardware design project	--	--	--	HW5
	Thu	12/9	28	hardware design project	--	--	--	
	Wed	12/15		Final exam, 2pm				