Week	Day	Date	Lecture	Reading	Homework	Lab	Project
1	Mon	8/25	**1. Introduction**				
	Wed	8/27	**2. Performance & Power**	H&P Ch 1., Appendix A, T. Mudge: Power: A First-Class Architectural Design Constraint			
	Fri	8/29				Lab 1	Labs are due the following Friday at 11:59pm
2	Mon	9/1	**Labor Day - No Lecture**				
	Wed	9/3	**3. Pipelining & Hazards I.**	H&P C.1-C.4		Lab 2	
	Fri	9/5					
3	Mon	9/8	**4. Pipelining & Hazards II.**				P1 due (Monday 9/8)
	Wed	9/10	**5. Scoreboard scheduling**	H&P C.5-C.7, 3.1-3.3, 3.10	HW 1 due	Lab 3	
	Fri	9/12					
4	Mon	9/15	**6. Scoreboarding & Tomasulo's**	H&P 3.4-3.6			P2 due (Monday 9/15)
	Wed	9/17	**7. Speculation & Precise Interrupts**	H&P 3.8-3.9, Smith & Pleszkun: Implementing Precise Interrupts	HW 2 due	Lab 4	
	Fri	9/19					
5	Mon	9/22	**8. P6 Microarchitecture**	H&P 3.13, D. Sima: Design Space of Register Renaming Techniques			P3 Milestone 1 (Monday 9/22)
	Wed	9/24	**9. Project description & Flipped P6**			Final Project Tips	
	Fri	9/26					
6	Mon	9/29	**10. MIPS R10K**	K. C. Yeager, The MIPS R10000 Superscalar Microprocessor, IEEE Micro, V. 16, No. 2, Apr. 1996.			P3 due (Monday 9/29)
	Wed	10/1	**10f. MIPS R10K Flipped**			Lab 5	Final project proposal due + meetings
	Fri	10/3			HW 3 due		Proposal meetings (continued)
7	Mon	10/6	**Midterm Review**				
	Wed	10/8	**Midterm TBD**				
	Fri	10/10				No Lab	
8	Mon	10/13	**Fall Break - No Lecture**				
	Wed	10/15	**11. Instruction flow**	H&P Ch. 3.3, T. Yeh: A comparison of dynamic branch predictors that use two levels of branch history		Industry & Groupwork	Milestone 1 + Meetings
	Fri	10/17					Milestone 1 Meetings (continued)
9	Mon	10/20	**12. Wide instruction fetch**	H&P CH. 3.9, McFarling: Combining Branch Predictors			
	Wed	10/22	**13. Memory Speculation**				
	Fri	10/24				Lab 6	
10	Mon	10/27	**14. Basic caches**	H&P 2.1			
	Wed	10/29	**15. Reducing miss rates**	H&P 2.2, 2.3, B.3, N. Jouppi: Improving direct-mapped cache performance			
	Fri	10/31				Lab 7	Milestone 2 + Meetings
11	Mon	11/3	**16. High Bandwidth Caches**				
	Wed	11/5	**17. Prefetching**				
	Fri	11/7			HW 4 due	No Lab	
12	Mon	11/10	**18. Virtual Memory**				
	Wed	11/12	**19. Multiprocessors I**				
	Fri	11/14				No Lab	
13	Mon	11/17	**20. Multiprocessors II**				
	Wed	11/19	**Team time (no lecture)**				Milestone 3 + Meetings
	Fri	11/21				No Lab	
14	Mon	11/24	**21. Data level parallelism and SMT**				
	Wed	11/26	**Thanksgiving - No Lecture**				
	Fri	11/28				No Lab	
15	Mon	12/1	**22. GPU's and HW Accelerators**				
	Wed	12/3	**Team Time (no lecture)**		HW 5 due		
	Fri	12/5				No Lab	
	Sat	12/6					Final Project Due (11:59 pm)
16	Mon	12/8	**Project presentations**				
	Wed	12/10	**No Classes**				
	Fri	12/12					
17	Wed	12/17	**Final (1:30-3:30 PM)**				