CS4290/CS 6290 High-Performance Computer Architecture

School of Computer Science
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Week	Dates	Lecture	Assignment Due	Book	Comments
1	8/19 8/21	What is computer architecture Basic pipelining		Ch.1 App A	
2	8/26 8/28	IEEE floating points Performance, metrics, benchmarks	Student Information(8/28)	App I Ch1	Guest lecture: Prof. Vuduc
3	9/2 9/4	ILP, Dependences, and register renaming		Ch2	
4	9/9 9/11	Instruction scheduling and instruction commit	HW #1 due (9/9)	Ch2/Ch3	
5	9/16 9/18	Branch prediction and speculative execution	Lab #1 (9/16)	Ch2/App G	
6	9/23 9/25	Predication and VLIW		App G	
7	9/30 10/2	Static exploitation of ILP	HW#2 due (10/2)	App G	Term project proposal due
8	10/7 10/9	Interrupts and exceptions Mid-term		App A	Mid-term
9	10/14 10/16	Caches		Ch5	Fall recess period
10	10/21 10/23	Memory	Lab #2 due (10/23)	Ch5/App C	
11	10/28 10/30	Multiprocessors		Ch4	
12	11/4 11/6	Synchronization	Hw #3 due (11/4)	Ch4	
13	11/11 11/13	Interconnection networks, Storage		Ch6/App E	
14	11/18 11/20	Case study: Pentium Case study: G80			
15	11/25 11/27	Reliability, redundancy Modern microprocessors	Lab #3 due (11/24)		Thanksgiving (11/27)
16	12/2 12/4	 Review session	HW #4 due (12/2)		Project due
Final					Final exam