

15-740/18-740 Computer Architecture

Fall 2012 Schedule

Table 1: 15-740/18-740, Fall 2012, Tentative Schedule. *(Revised 10/25/12)*

Class	Date	Day	Topic	Reading	Assignments
1	9/11	Tue	Performance & Technology	H&P Ch. 1	
2	9/12	Wed	x86 Programming	H&P App.. K.3 (online)	
3	9/13	Thu	RISC vs. CISC Instruction Sets	H&P App. A & K	
4	9/18	Tue	The Memory Hierarchy	H&P Ch. 2.1-2.3, 2.5-2.7	#1 Out
5	9/19	Wed	Intro to Parallel Architecture	H&P Ch. 5.1, CSG Ch. 1	
6	9/20	Thu	Parallel Programming I	CSG Ch. 2	
7	9/25	Tue	Parallel Programming II	CSG Ch. 3 & 4	
8	9/26	Wed	Cache Coherence: Small Scale I	H&P Ch. 5.2-5.3, CSG Ch. 5	
9	9/27	Thu	Cache Coherence: Small Scale II	H&P Ch. 5.2-5.3, CSG Ch. 5	
10	10/2	Tue	Cache Coherence: Large Scale I	H&P Ch. 5.4, CSG Ch. 5	#1 Due, #2 Out
11	10/3	Wed	Cache Coherence: Large Scale II	H&P Ch. 5.4, CSG Ch. 5	
12	10/4	Thu	Memory Consistency Models	H&P Ch. 5.6, CSG Ch. 6	
	10/9	Tue	Exam I		
13	10/10	Wed	Synchronization	H&P Ch. 5.5, CSG Ch. 5	
14	10/11	Thu	Thread-Level Speculation	Handouts	
15	10/16	Tue	<i>Recent Research on Architecture I</i>	Handouts	#2 Due
16	10/17	Wed	<i>Recent Research on Architecture II</i>	Handouts	
17	10/18	Thu	<i>Recent Research on Architecture III</i>	Handouts	
18	10/23	Tue	<i>Meetings to discuss Project Proposal ideas.</i>		
19	10/24	Wed	Interconnects	H&P App. F, CSG Ch. 10	
20	10/25	Thu	Virtual Memory	H&P Ch. 2.4, App. B.4-B.5	Project Proposal
21	10/30	Tue	Pipelining: Overview & Hazards	H&P Ch. 3.1, App. C.1-C.6	
22	10/31	Wed	Instruction-Level Parallelism	H&P Ch. 3.2-3.10	
	11/8	Thu	Exam II		
	11/20	Tue			Project Milestone
	12/4	Tue			Project Due
	12/6	Thu	<i>Project Poster Session</i>		