6.846 at a Glance, Spring 2010

Handout S10-H02

Wk. of Monday	Tuesday Lecture	Wednesday	Thursday Lecture	Friday
Registration Day 2/1	L1 Intro to multicore; Applications, technology, and parallel architecture		L2 Intro to the multicore lab and parallel programming	
2/8	L3 Applications; Continuum problems, iterative methods Hw1out (messaging)		L4 Applications; Continuum problems, direct methods	
Presidents Day 2/15 Holiday	***Monday Schedule***		L5 Applications; Stream problems, networking, beamforming	
2/22	L6 Applications; Graph problems Hw1in Hw2out (channels, shared mem)		L7 Applications; Particle problems	
3/1	L8 Computational models; Communication and synchronization hw1sol Discuss project ideas and think about teams		L9 Applications; Stream problems; video processing Discuss project ideas and form teams	
3/8	L10 Emerging parallel programming languages Hw2in Finalize project – proposals due next week		L11 Self aware parallel computing Finalize project – proposals due next week	
3/15	L12 Designing multicores; Core size versus number of cores hw2sol Hw3out (grain size)		L13 Continue Designing multicores; Core size versus number of cores **1 Page Project proposals due**	
3/22	**Spring Break**			
3/29	L14 Parallel machines and languages		L15 Continue Parallel machines and languages; start Interconnection networks	
4/5	L16 Interconnection networks; Basics Hw3in Hw4out (networks)		L17 Interconnection networks; Performance	
4/12	L18 Interconnection networks; VLSI technology primer **1 Page mid-term Project update due**		L19 Interconnection networks; Physical design constraints and network design	
Patriots Day 4/19 Holiday	***Patriots Day Holiday***		L20 Caches and memory systems; basics Hw4in Hw5out (coherence)	
4/26	L21 Caches and memory systems; cache coherence		L22 Caches and memory; Sequential consistency, transactional memory	
5/3	L23 Processors for multicores; multithreading		L24 Synchronization and messaging Hw5in	
5/10	L25 Project presentations **Project reports due**		L26 Project presentations **Last day of classes**	**Finals Next Week**