COMPUTER SCIENCE 2351
Spring 2009
Course Outlines

Week	Date	Lecture Topics	Reading
1	2/23	introduction to the course	
	2/25	introduction to alg.	1.1-1.3.1
2	3/2	recursive alg; space complexity	1.3.2, 1.5.1
	3/4	time complexity	1.5.2
3	3/9	asymptotic notation	1.5.3-1.5.4
	3/11	performance measurement; array	1.6, 2.1
4	3/16	array; structure; polynomial	2.2-2.4
	3/18	matrix;sparse matrix	2.5
5	3/23	array representation; stack; queue	2-6, 3.1, 3.3
	3/25	evaluation of expression	3.6-3.7
6	3/30	singly linked list ; midterm1(3/31)	4.1-4.2
	4/1	spring break	
7	4/6	circular & doubly linked lists	4.5, 4.8
	4/8	tree (representation, binary tree)	5.1-5.2
8	4/13	binary-tree traversal	5.3-5.4
	4/15	heap	5.6
9	4/20	no class (DATE conference)	
	4/22	no class (DATE conference)	
10	4/27	binary search tree	5.7
	4/29	forest; set representation	5.9-5.10
11	5/4	union & find; graph	5.10, 6-1
	5/6	graph traversal; spanning tree ; midterm2 (5/7)	6.2.1-6.2.4
12	5/11	Kruskal's alg.	6.3.1
	5/13	Prim's & Sollin's algs	6.3.2-6.3.3
13	5/18	directed graph; single source shortest path	6.4.1
	5/20	all pairs shortest paths	6.4.2-6.4.4
14	5/25	topological order (AOV network)	6.5.1
	5/27	static hashing	8.2
15	6/1	sorting; insertion sort;quick sort	7.1-7.4
	6/3	merge, heap sorts	7.5-7.6
16	6/8	radix sorts	7.7,7-9
	6/10	external sort	7.10
17	6/15	final exam (chap 6-)	