

Week	Date	Lesson and Lab Focus	Readings (Chp)	Assigns	Weekly Topic
1	Sept 3	Lesson 1: Course Introduction			Introduction
	Sept 4	Lesson 2: Algorithmic Efficiency	1.1 - 1.4		
2	Lab 1	Efficiency Analysis Lab (math foundations)			Efficiency Analysis (non-recursive)
	Sept 10	Lesson 3: Orders of Growth	2.1 - 2.3		
	Sept 11	Lesson 4: Sample Problems	lecture notes		
3	Lab 2	Efficiency Analysis Lab (sample problems)			Brute Force
	Sept 17	<i>Classes Cancelled</i>			
	Sept 18	Lesson 5: Brute Force Searching & Binary Search	3.1, 3.2, 4.3		
4	Lab 3	Search Algorithm Problems		Assign #1 Distributed	Brute Force
	Sept 24	Lesson 6: Assignment Problem and other Brute Force Algos	3.3, 3.4		
	Sept 25	Lesson 7: Generating Permutations & Subsets	5.4		
5	Lab 4	Hash and Map Problems			Hashing
	Oct 1	Lesson 8: Input Enhancement	7.1		
	Oct 2	Lesson 9: Hashing and Key-based Structures	7.3		
6	Lab 5:	Heaps and Priority Queues			Fundamental Data Structures
	Oct 8	Lesson 10: Maps and Sets	lecture notes		
	Oct 9	Lesson 11: Heaps & Priority Queues	6.4		
7	Lab 6:	- sample midterm problems -		Assign #1 Due	Heaps
	Oct 15	Lesson 12: Heapsort	6.4		
	Oct 16	Lesson 13: Review for Midterm			
8	Oct 22	Midterm Exam			

Week	Date	Topic	Reference (Chp)	Assigns	Theme
8	No Lab	- no lab this week -		Assign# 2 Distributed	Intro to Graphs
	Oct 23	Lesson 14: Graph Theory Intro	1.4		
9	Lab 7	Graph Implementations (Adjacency matrix)			Graph Traversal
	Oct 29	Lesson 15: DFS / BFS	5.2		
	Oct 30	Lesson 16: DFS & BFS Problems	handouts		
10	Lab 8	DFS and BFS Problems			Topological Sort
	Nov 5	Lesson 17: Topological Sort	5.3		
	Nov 6	Lesson 18: Topological Sort Problems	handouts		
11	Lab 9	Topological Sorting Problems		Assign #2 Due	Spanning Trees
	Nov 12	Lesson 19: Greedy Algorithms	9.1	Assign #3 Distributed	
	Nov 13	Lesson 20: MST	9.1, 9.2		
12	Lab 10	Spanning Tree Problems			Shortest Path
	Nov 19	Lesson 21: Single-Source Shortest Path	9.3		
	Nov 20	Lesson 22: Transitive Closure (DP)	8.2		
13	Lab 11	Shortest Path Problems			Shortest Path
	Nov 26	Lesson 22: All-Pairs Shortest Path (DP)	8.3		
	Nov 27	Lesson 23: TBD			
14	Lab 12	TBD		Assign #3 Due	
	Dec 3	Lesson 24: TBD			
	Dec 4	Lesson 25: Final Exam Review			
15	Dec 8-12	Final Exam Week			