#	Date	Topic	Readings	Lab	Assignment
1	September 3rd	Intro	Course outline	No labs	Assignment 1 Due: Sept. 12th
2	September 5th	Rule of Sum, Rule of Product, Permutations	Grimaldi – Sections 1.1, 1.2		
3	September 9th	Combinations, Binomial Theorem	Grimaldi – Sections 1.3	1	
4	September 10th	Combinations with repetition, Pigeonhole Principle	Grimaldi – Sections 1.4, 5.5		
5	September 12th	Pseudocode	Goodrich – pages 1 - 9		
6	September 16th	Counting Operations	Goodrich – pages 1 - 9	2	Assignment 2 Due: Oct. 1st
7	September 17th	Recursion, Recurrence Relations, Repeated Substitution	Goodrich – pages 10, 19 - 25		
8	September 19th	Proofs	Grimaldi – Sections 4.1 and 4.2		
9	September 23rd	Induction, Loop Invariants	Grimaldi – Sections 4.1 and 4.2	3	
10	September 24th	Asymptotic Analysis	Goodrich – pages 11 - 18		
11	September 26th	Other Asymptotics	Goodrich – pages 11 - 18		
--	September 30th	**National Day for Truth and Reconciliation**		4	
12	October 1st	Asymptotic Analysis (part 3)	Grimaldi – Sections 4.1 and 4.2		
13	October 3rd	ADTs, Stacks, Queues	Goodrich – Sections 2.1 & 2.2		Assignment 3 Due: Oct. 17th
14	October 7th	Lists	Goodrich – Sections 2.1 & 2.2	No labs	
--	October 8th	**MIDTERM 1**			
15	October 10th	Selection Sort, Bubble Sort, Insertion Sort	Goodrich – Section 5.1, 5.2		
16	October 14th	Merge Sort	Goodrich – Section 8.1	5	
17	October 15th	Quicksort	Goodrich – Section 8.2		
18	October 17th	Trees	Goodrich – Section 2.3		
19	October 21st	Heaps, Heapify	Goodrich – Chapter 5	6	Assignment 4 Due: Oct. 29th
20	October 22nd	Comparison sorting algorithm analysis	Goodrich – Section 8.3		
21	October 24th	Bucket Sort, Radix Sort	Goodrich – Section 9.1		
22	October 28th	Binary Search Trees (BSTs)	Goodrich – Chapter 3	7	
23	October 29th	AVL trees	Goodrich – Section 4.2		
24	October 31st	AVL tree algorithms	Goodrich – Section 4.2		Assignment 5 Due: Nov. 21st
25	November 4th	Red-Black Trees	Goodrich – Section 4.3	8	
	November 5th	**MIDTERM 2**			
26	November 7th	2-3 Trees, B-Trees	Goodrich – Pages 652, 653		
	November 11th	**READING BREAK**		No labs	
	November 12th	**READING BREAK**			
27	November 14th	B+ Trees			
28	November 18th	Compression	Goodrich – Section 10.3	9	
29	November 19th	Graphs (intro and terminology)	Goodrich – Section 13.1		
30	November 21st	Depth-First Search (DFS)	Goodrich – Section 13.2		
31	November 25th	Breadth-First Search (BFS)	Goodrich – Section 13.3	10	Assignment 6 Due: Nov 28th
32	November 26th	Digraphs, Topological Sort	Goodrich – Section 13.4		
33	November 28th	Transitive Closure	Goodrich – Section 13.4		
34	December 2nd	Dijkstra's Algorithm	Goodrich – Section 14.2	No labs	
35	December 3rd	Review			