MODIFIED COURSE OUTLINE

CSE-237 : ALGORITHM DESIGN AND ANALYSIS
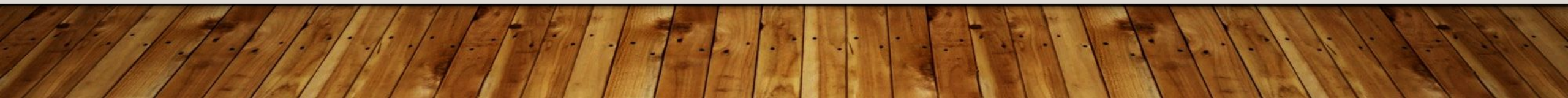
#	Topic	Contents	Comments
1	Analyis of Algorithm	Basic, Asymptotic Analysis, Recurrence	COMPLETED
2	Greedy Algorithms	Basic Concept, Characteristics and Application,	COMPLETED
		Knapsack Problem - 0/1 and Fractional	COMPLETED
		Job Scheduling	COMPLETED
3	Dynamic Algorithms	Basic Concept, Characteristics and Application,	COMPLETED
		Matrix-Chain Multiplication	COMPLETED
		Sub-Sequence Problem - LCS, LDS	COMPLETED
		Coin-Change Problem	COMPLETED
4	Advance Data Structure	Binomial Heap	SELF-PACED
		Red-Black Tree	SELF-PACED
		Strassen's Algorithm	COMPLETED

#	Topic	Contents	Comments
4	Network Flow	Basics - Flow Networks, Max-Flow, Min-Cut	ONLINE
		Ford Fulkerson Algorithm	ONLINE
		Maximum Bipartite Matching	ONLINE
5	Branch-and-Bound	Basic Terminology, Problem-Space/Solution Tree	ONLINE
		N-Queen and 15-Puzzle Problem	ONLINE
		Graph Coloring	ONLINE
6	String Matching	Basic - Notation, Terminology, Naive Algorithm	ONLINE
		Rabin Karp Algorithm	ONLINE
		Knuth Morris Pratt (KMP) Algorithm	ONLINE
7	Computational Geometry	Finding Segment-Segment Intersection, Convex-Hull and Closest-Pair of Points	ONLINE