CSC 317 Lecture Schedule for Spring 2025

Instructor: Dilip Sarkar, Office: Ungar 310 H,
Email: sarkar@miami.edu, Phone: 305-284-2256

Date	Day	LN	WH set assigned	WH set Due	Quiz	Topics
Jan 13	M	1				1.1 Algorithms
Jan 15	W	2				1.2 Algorithm as a technology and 2.1 Insertion Sort
Jan 17	F	3				2.2 Analyzing algorithms
Jan 22	W	4	HW1			2.3 Designing algorithms
Jan 24	F	5				7.1 Description of quicksort algorithm
Jan 27	M	6				3.1 Asymptotic notations, 3.2 Standard notations and common functions.
Jan 29	W	7	HW2	HW1	Quiz I	9.1 Minimum and maximum
Jan 31	F	8				9.3 Selection in worst-case linear time
Feb 03	M	9				4.3 The substitution method for solving recurrences
Feb 05	W	10	HW3	HW2		4.4 Recursion-tree method for solving recurrences
Feb 07	F	11				4.5 The master method for solving recurrences
Feb 10	M	12				4.5 The master method for solving recurrences (cont.)
Feb 12	W	13	HW4	HW3	Quiz II	7.2 Performance of quicksort
Feb 14	F	14				5.1 Hiring problem, 5.2 Indicator random variables
Feb 17	M	15				9.2 Selection in expected linear time
Feb 19	W	16	HW5	HW4		9.2 Selection in expected linear time (cont.)
Feb 21	F	17				11.1 Direct-address tables and 11.2 Hash tables
Feb 24	M	18				11.3 Hash functions and 11.4 Open addressing
Feb 26	W	19	HW6	HW5	Quiz III	12.1 Binary search trees, 12.2 quarrying a binary search tree
Feb 28	F	20				12.3 Insertion and deletion
Mar 03	M	21				13.1 Properties of red-black trees
Mar 05	W	22	HW7	HW6		13.2 Rotations and 13.3 Insertions
Mar 07	F	23				15.1 Rod cutting
Mar 17	M	24				15.2 Matrix-chain multiplication
Mar 19	W	25	HW8	HW7		15.2 Matrix-chain multiplication (cont.)
Mar 21	F	26				15.4 Optimal binary search trees
Mar 24	M	27			Quiz IV	15.4 Optimal binary search trees (cont.)
Mar 26	W	28	HW9	HW8		16.1 Activity selection problem and 16.2 Elements of the greedy strategy
Mar 28	F	29				16.3 Huffman codes
Mar 31	M	30				21.1 Disjoint-set operations
Apr 02	W	31		HW9		21.2 Linked-list representation of disjoint sets
Apr 04	F	32	HW10			21.3 Disjoint-set forests
Apr 07	M	33			Quiz V	22.1 Representation of graphs
Apr 09	W	34				22.2 Breadth-first search
Apr 11	F	35		HW10		22.3 Depth-first search
Apr 14	M	36				22.4 Topological sort
Apr 16	W	37	HW11			22.5 Strongly connected components
Apr 18	F	38				23.1 Growing a minimum spanning tree
Apr 21	M	39				23.2 The algorithms of Kruskal and Prim
Apr 23	W	40	HW12	HW11		24.2 Single-source shortest paths in directed acyclic graphs
Apr 25	F	41				24.3 Dijkastra's algorithm
Apr 28	M	42			Quiz VI	25.1 Shortest Path and matrix multiplication, and 25.2 The Floyd-Warshall Algorithm
Apr 30	W			HW12		