



Indraprastha College for Women

University of Delhi

Work Plan for ODD SEMESTER – 2026

Course Name:		BA(Prog.)		
Paper Title:		Design and Analysis of Algorithms		
Unique Paper Code:				
Semester:		III		
Faculty(s):		Dr. Seema Jangra		
Year:		2026		
	Work Plan			
Week No.	Unit No.	Learning Objective	Referen ce No.	Topics to be Covered
28 Jul - 31Jul	IV	Hashing	[1]	Ch 11 - 11.2 (except Independent Uniform Hashing and Analysis of Hashing with chaining)
3 Aug - 8Aug	IV	Hashing	[1]	Ch 11 - 11.2 (except Independent Uniform Hashing and Analysis of Hashing with chaining)
10Aug - 15Aug	IV	Hashing	[1]	Ch 11 - 11.2 (except Independent Uniform Hashing and Analysis of Hashing with chaining)
17Aug - 22Aug	IV	Hashing	[1]	Ch 11 - 11.2 (except Independent Uniform Hashing and Analysis of Hashing with chaining)
24Aug - 29Aug	IV	Hashing	[1]	Ch 11 - 11.2 (except Independent Uniform Hashing and Analysis of Hashing with chaining)
31Aug - 5Sep	IV	Hashing	[1]	Ch 11 - 11.2 (except Independent Uniform Hashing and Analysis of Hashing with chaining)
7Sep - 12Sep	IV	Hashing	[1]	11.3 (upto and including multiplication method)
14Sep - 19Sep	IV	Hashing	[1]	11.3 (upto and including multiplication method)
21Sep - 26Sep	IV	Hashing	[1]	11.3 (upto and including multiplication method)

28Sep - 30Oct	IV	Hashing	[1]	11.3 (upto and including multiplication method)
5Oct - 11Oct	IV	Hashing	[1]	11.3 (upto and including multiplication method)
12Oct - 17Oct	IV	Hashing	[1]	11.3 (upto and including multiplication method)
19Oct - 24Oct	Mid Semester Break			
26Oct - 31Oct	IV	Hashing	[1]	11.4 (except Analysis of open-address hashing)
2Nov - 7Nov	IV	Hashing	[1]	11.4 (except Analysis of open-address hashing)
9Nov - 14Nov	IV	Hashing	[1]	11.4 (except Analysis of open-address hashing)
16Nov - 19Nov	IV	Hashing	[1]	11.4 (except Analysis of open-address hashing)
24Nov - 26Nov	IV	Hashing	[1]	11.4 (except Analysis of open-address hashing)

Unit	Contents/Syllabus
I	Searching, Sorting, Selection, Divide and Conquer Ch 2 - 2.1, 2.2, 2.3, Ch 4 - 4.2, Ch 6 - 6.4, Ch 7 - 7.1, 7.2, 7.3, 7.4 (upto 7.4.1) Ch 8 - 8.1, 8.2, 8.3, Ch 9 - 9.1. [1]
II	Graphs and Greedy algorithms Ch 3, Ch 4 - 4.1 (upto page 121, excluding Extensions), 4.4, 4.5 (only Prim's Algorithm and related theorems/sub-sections to be discussed). [2] Ch 15 - 15.2 [1]

III	Dynamic Programming Ch 6 - 6.1, 6.2, 6.4. [2]
IV	Hash Functions, Collision resolution schemes Ch 11 - 11.2 (except Independent Uniform Hashing and Analysis of Hashing with chaining), 11.3 (upto and including multiplication method), 11.4 (except Analysis of open-address hashing) [1]
S. No.	Name of Authors/Books/Publishers
1.	Cormen, T.H., Leiserson, C.E., Rivest, R. L., Stein C. Introduction to Algorithms, 4th edition, Prentice Hall of India, 2022.
2.	Kleinberg, J., Tardos, E. Algorithm Design, 1st edition, Pearson, 2013.

Paper Components			
Credits	Lecture (L)	Tutorial (T)	Practical (P)
4	3	0	1
Assessment Scheme			
S.No.	Component	Marking Scheme	Total Marks
1	Internal Assessment - Assignment/Quiz/Project/Presentation - Class Test - Attendance		30
		12	
		12	
		6	
2.	Continuous Assessment (Tutorial) - Activity 1 - Activity 2 - Attendance		NA
3.	Practical - Continuous Assessment - End Term Written/Practical Exam - Viva		40
		10	
		20	
		10	

	End Semester Examination	90
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