

CS 758/858 Schedule, Fall 2024

revision of August 26, 11am

<http://www.cs.unh.edu/~rum1/cs758/>

lecture Tuesdays and Thursdays 11:10am–12:30pm, Kingsbury N121

recitations Fridays 1:10pm–2:00pm, Kingsbury N101

Week	Class	Date	Topic	Book	Due Night Before
<i>sorting</i>					
1	1	Aug 27	big-O, sorting	2, 3	
	2	Aug 29	more sorting	8	
2	3	Sep 3	heaps	7, 6	asst 1 (radix sort)
<i>searching</i>					
	4	Sep 5	hashing	11, 16	asst 2 (quicksort) due Sep 7
3	5	Sep 10	binary trees	12	
	6	Sep 12	red-black trees	13	asst 3 (babblers)
4	7	Sep 17	red-black deletion		
	8	Sep 19	tries		asst 4 (I/O scheduling)
<i>optimization</i>					
5	9	Sep 24	dynamic programming	14	
	10	Sep 26	knapsack		asst 5 (spelling correction)
6	11	Oct 1	more DP		
	12	Oct 3	parsing		asst 6 (sequence alignment)
7	13	Oct 8	greedy	15	
<i>graphs</i>					
	14	Oct 10	graph traversal	20	asst 7 (parsing)
8	[no lecture Oct 15: Monday schedule]				
		Oct 17	Midterm Exam (in class)		
9	15	Oct 22	union-find, components	19	asst 8 (algorithm design)
	16	Oct 24	spanning trees	21	
10	17	Oct 29	shortest paths	22	asst 9 (MST halftoning)
	18	Oct 31	all pairs paths	23	
11	19	Nov 5	network flow	24	asst 10 (route planning)
	20	Nov 7	matching, LPs	24.3, 29	
<i>NP-completeness</i>					
12	21	Nov 12	NP-completeness	34	asst 11 (flow)
	22	Nov 14	satisfiability		
13	23	Nov 19	clique		asst 12 (NP proof)
	24	Nov 21	undecidability		
<i>coping with NP-completeness</i>					
14	25	Nov 26	approximation	35	asst 13 (NP proof)
	[no lecture Nov 28 or recitation Nov 29: Thanksgiving]				
15	26	Dec 3	backtracking		
	27	Dec 5	wildcard slot		asst 14 (algorithm design)
		Dec 11	Final Exam, 3:30pm–5:30pm? (finalized by registrar in Nov)		

Reminders: No credit for late work.

You must be present for the exams.