CompSci 161 Winter 2023 Projected Schedule

Note that this is a *projected* schedule and is subject to change.

All problem sets are due at **10:30 AM**. There are no late submissions for problem sets or warm-ups.

If there is a discrepancy between the due date listed in the syllabus and the due date written on an assignment, the one on the assignment is the one to follow.

A review of prerequisites is available on the course website as “Problem Set 0” and will not be collected.

There are warm-ups, not listed here after the first one, that are due also. They will appear after the lecture on GradeScope, prior to the lecture in which they are due. It is unlikely that there will be a separate announcement. It is your responsibility to check for these.

Week	Date	Topic	Planned Due Dates
1	Jan 9	Celebrity finding. Review topics in lecture and discussion.	
	Jan 11		
	Jan 13		First warm-up due
Monday January 16: Martin Luther King, Jr. Day			
2	Jan 18	Inversion Counting. **Jan19 discussions are required.**	PSet 1 due
	Jan 20	QuickSort and Order Selection	
3	Jan 23	Arithmetic Algorithms for Multiplication	
	Jan 25	The Minima Set problem	PSet 2 due
	Jan 27	Concurrent Min and Max; binary exponentiation	
4	Jan 30	Deterministic Selection	
	Feb 1	**Topic Quiz: Divide and Conquer Algorithms**	PSet 3 due 1/31
	Feb 3	Weighted Interval Scheduling	
5	Feb 6	Longest Common Subsequence	
	Feb 8	Subset Sum	
	Feb 10	Longest Increasing Subsequence	PSet 4 due
6	Feb 13	Optimal Offline Binary Search Trees	
	Feb 15	Dynamic Programming on Trees	PSet 5 due
	Feb 17	**Topic Quiz: Dynamic Programming**	
Monday Feb 20: Presidents’ Day Holiday			
7	Feb 22	Jarnik’s Algorithm; correctness of Minimum Spanning Trees	

	Feb 24	Unweighted Interval Scheduling	
8	Feb 27	Scheduling with Deadlines	
	Mar 1	Fractional Knapsack; comparisons of techniques.	PSet 6 due
	Mar 3	Text compression and Huffman Trees	
9	Mar 6	Greedy Algorithms on Trees	
	Mar 8	Kruskal's Algorithm and The Union-Find Data Structure	PSet 7 due
	Mar 10	**Topic Quiz Greedy Algorithms**	
10	Mar 13	Additional Divide and Conquer Topic	
	Mar 15	*To be determined*	
	Mar 17	*To be determined*	
Final Exam: Fri, Mar 24, 8:00-10:00am. There will be no early finals.			

Some odd numbered problem sets are available for a shorter period of time than their preceding problem set. All build on the skills developed in the earlier one.

I apologize for the inconsistency of due dates for problem sets. I wish there were a way to organize this class this quarter that included a rule like "all problem sets are due on Wednesdays."