

Spring 2024 Schedule - CSE 3318, 001 and 002 - Tentative

| Lect | Do | Day | Mont | Topic |
|---|--|-----|------|---|
| 1 | T | 16 | Jan | Introduction, Syllabus, (if there is time, Examples of Algorithms-insertion sort) |
| 2 | R | 18 | Jan | C Review |
| 3 | T | 23 | Jan | Linked Lists (Students should have reviewed pointers) |
| 4 | R | 25 | Jan | Time complexity |
| 5 | T | 30 | Jan | Time complexity |
| 6 | R | 1 | Feb | Sorting Algorithms continued, selection sort, indirect sorting, binary search |
| 7 | T | 6 | Feb | Growth of functions, Summations |
| 8 | R | 8 | Feb | Count sort, Radix Sort, Bucket Sort |
| 9 | T | 13 | Feb | Stacks, Queues |
| 10 | R | 15 | Feb | Heaps |
| 11 | T | 20 | Feb | Binary trees, BST (Binary Search Trees) |
| 12 | R | 22 | Feb | Leetcode problem solving |
| 13 | T | 27 | Feb | 2-3-4 Search Tree |
| 14 | R | 29 | Feb | Midterm 1 - tentative |
| 15 | T | 5 | Mar | Hash Table |
| 16 | R | 7 | Mar | Optional (if time permits): Huffman Tree (Greedy Algorithms) |
| Spring break: March 11 - March 15 | | | | |
| 17 | T | 19 | Mar | Greedy Algorithm for Knapsack problem |
| 18 | R | 21 | Mar | DP: Knapsack |
| 19 | T | 26 | Mar | DP : Job Scheduling (Greedy,DP, brute force), |
| 20 | R | 28 | Mar | DP : LCS, LIS, ED (other: fewest coins, rod cutting, stair climbing); DP-Memoization |
| 21 | T | 2 | Apr | Midterm 2 - tentative |
| 22 | R | 4 | Apr | Graphs |
| 23 | T | 9 | Apr | Minimum-Cost Spanning Trees |
| 24 | R | 11 | Apr | Shortest Paths, Graphs (Applications of DS in Algorithms, Language Library discussions) |
| 25 | T | 16 | Apr | Merge sort, |
| 26 | R | 18 | Apr | Quicksort |
| 27 | T | 23 | Apr | Recurrences - Master Theorem |
| 28 | R | 25 | Apr | Recurrences - Master Theorem |
| 29 | T | 30 | Apr | Recurrences - Master Theorem, tree method |
| R | 2 May Section 001 FINAL Exam Thursday, 11am-1pm, most likely in classroom | | | |
| T | 7 May Section 002 FINAL Exam Tuesday, 11am-1pm, most likely in classroom | | | |
| <i>As the instructor for this course, I reserve the right to adjust the schedule in any way that serves the educational needs of the students enrolled in this course. – Alexandra Stefan</i> | | | | |

OTHER important dates

- 31 Jan Census date
- 29 Mar Last day to drop
- 30 Apr Last day of classes
- 2 to 8 May Final exams week