

Weekly Syllabus for CSC225 Fall 2022

| Week - Dates | Lecture | Readings |
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| 1 – Sep. 8 | Lect-1 - Intro Lect-2 – Discrete Math | Grimaldi – sect. 1.1 to 1.4 |
| 2 – Sep. 12 & 15 | Lect-2 – Discrete Math Lect-3 – Counting operations | Grimaldi – sect. 5.5 Goodrich – pg. 1 to 9 |
| 3 – Sep. 22 | Lect-3 – Counting operations | Goodrich – pg. 1 to 9 |
| 4 – Sep. 26 & 29 | Lect-4 - Recursion Lect-5 – Proofs | Grimaldi – sect. 4.1 and 4.2 Goodrich – pg. 10, 19 to 25 |
| 5 – Oct. 3 & 6 | Lect-6 – Big-Oh Lect-7 – Other Bigs | Goodrich – pg. 11 to 18 |
| 6 – Oct. 13 | Lect-8 - ADTs Lect-9 – Sorting Intro | Goodrich – sect. 2.1, 2.2, and 5.2 Sedgewick – sect. 2.1 |
| 7 – Oct. 17 & 20 | Lect-10 - Mergesort Lect-11 - Quicksort | Goodrich – sect. 8.1 and 8.2 Sedgewick – sect. 2.2 and 2.3 |
| 8 – Oct. 27 | Lect-12 - Priority Queues Lect-13 – Lower Bound Proof | Goodrich – 5.1 to 5.4, 8.3 Sedgewick – 2.2 and 2.4 |
| 9 – Oct. 31 & Nov. 3 | Lect-14 – Bucket Sort Lect-15 – BSTs | Goodrich – sect. 9.1, 2.3 and 3.1 Sedgewick – 3.1 and 3.2 |
| 10 – Nov. 7 | Lect-16 – 2-3 Trees Lect-17 – Red-Black Trees | Goodrich – sect. 4.1 and 4.3 Sedgewick – sect. 3.3 |
| 11 – Nov. 14 & 17 | Lect-18 – Red-Black Trees Lect-19 – Graphs | Sedgewick – sect. 3.3 Grimaldi – sect. 11.1 and 11.2 |
| 12 – Nov. 21 & 24 | Lect-20 – Graph ADT Lect-21 – DFS | Goodrich – sect. 13.1 and 13.2 Sedgewick – sect. 4.1 |
| 13 – Nov. 28 & Dec. 1 | Lect-22 – BFS Lect-23 – Connectivity | Goodrich – sect. 13.3 and 13.4 Sedgewick – sect. 4.2 |
| 14 – Dec. 5 | Lect-24 – Topological Sort | Goodrich – sect. 13.4 Sedgewick – sect. 4.2 |