

# CSCI 2300 Introduction to Algorithms

Textbook: **Algorithms** by Dasgupta, Papadimitriou, and Vazirani

| Week | Readings             | Monday   | Tuesday                                   | Wednesday   | Thursday  | Friday                         |
|------|----------------------|--|---|---|---|--------------------------------|
| 1    | Ch.0, §3.1, §4.1-4.2 | 1/13: Syllabus, Algorithms, Notation, Ethical Algorithms             |   | 1/15 Lab: [LAB 1]   | 1/16: Graph Algorithms                            |                                |
| 2    | §3.1, §4.1-4.2       | 1/20: NO CLASSES (MLK Jr. Day)                                       |   | 1/22 Lab: [LAB 2]   | 1/23: Graph Algorithms                            | 1/24: [HW1 due] (add deadline) |
| 3    | §3.2-3.4, §4.3-4.4   | 1/27: Graph Algorithms   |   | 1/29 Lab: Recitation/Review                                 | 1/30: Graph Algorithms                            |                                |
| 4    | §4.5, §4.7           | 2/3: Graph Algorithms  |   | 2/5 Lab: [LAB 3]  | 2/6: Graph Algorithms                             | 2/7: [HW2 due]                 |
| 5    | §5.1-5.2, §5.4       | 2/10: Graph Algorithms   |   | 2/12 Lab: Recitation/Review                                 | 2/13: Greedy Algorithms                           |                                |
| 6    |                      | 2/17: NO CLASSES (Presidents Day)                                    | 2/18: Greedy Algorithms (Monday schedule) | 2/19 Lab: Exam 1 Review                                     | 2/20: Greedy Algorithms [6:00PM EXAM 1 WEST HALL] | 2/21: [HW3 due]                |
| 7    | §2.1-2.3             | 2/24: Genetic Algorithms [HW3 due]                                   |   | 2/26 Lab: Recitation/Review                                 | 2/27: Divide and Conquer                          |                                |
| 8    | §2.4-2.5             | 3/2: Divide and Conquer  |   | 3/4 Lab: [LAB 4]  | 3/5: Divide and Conquer                           | 3/6: [HW4 due] (drop deadline) |
|      |                      | 3/9-3/13: NO CLASSES (Spring Break)                                  |   |   |   |                                |
|      |                      | 3/16-3/20: NO CLASSES (Extended Spring Break)                        |   |   |   |                                |
| 9    | §6.1-6.3             | 3/23: Dynamic Programming  |   | 3/25: Optional Lab Sessions (office hours)                  | 3/26: Dynamic Programming                         |                                |
| 10   | §6.4, §6.6-6.7       | 3/30: Dynamic Programming  |   | 4/1 Lab: [LAB 5]  | 4/2: Dynamic Programming                          |                                |
| 11   | §7.1-7.2             | 4/6: Dynamic Programming   | 4/7: [HW5 due]                            | 4/8 Lab: Recitation/Review                                  | 4/9: Dynamic Programming                          | 4/10: (P/NC deadline)          |
| 12   | §7.3, §8.1           | 4/13: Network Flow and Linear Programming                            |   | 4/15 Lab: [LAB 6]   | 4/16: Network Flow and Linear Programming         |                                |
| 13   | §8.2-8.3             | 4/20: NP-Complete Problems   | 4/21: [HW6 due]                           | 4/22 Lab: Exam 2 Review                                     | 4/23: NP-Complete Problems [EXAM 2]               |                                |
| 14   | §9.1-9.3             | 4/27: Randomized Algorithms, Final Exam Review                       |   | 4/29 Lab: Final Exam Review [HW7 due] (last day of classes) | 4/30-5/1: NO CLASSES (Reading Days)               |                                |
| 15   |                      | 5/4-5/8: FINAL EXAMS WEEK [COMPREHENSIVE FINAL EXAM WEDNESDAY (5/6)] |   |   |   |                                |