

Tentative Schedule CS 325-400

Week(s)	Topics & Readings from CLRS and JE	Supplements	Assignments
0	JE: 0. Introduction Ch 1: Role of Algorithms	Review material from CS 225	Syllabus Quiz
1	Ch 2: Getting Started Insertion Sort, Analyzing Algorithms, Designing Algorithms Ch 3: Growth of Functions	KA: Intro to Algorithms. Binary Search Insertion Sort KA: Asymptotic Notation	Quiz 1 HW 1 & Discussion
2	Ch 4: Divide and Conquer JE: Appendix II: Solving Recurrences	KA: Recursive Algorithms Merge Sort	Quiz 2 HW 2 & Discussion
3	Ch 15: Dynamic Programming JE: 5. Dynamic Programming		Quiz 3 HW 3 & Discussion
4	Ch 16: Greedy Algorithms		Quiz 4 HW 4 & Discussion
5 & 6	Ch 22: Elementary Graph Algorithms Ch 23 Minimum Spanning Tree Ch 24: Shortest Path JE: Basic Graph Algorithms	KA: Graph representation Breadth-first search	Quiz 5a & 5b HW 5 & Discussion
7	Ch 29 Linear Programming	LINDO Software available at http://engineering.oregonstate.edu/computing/citrix/	Quiz 6 HW 6 & Discussion
8	Ch 34 NP Completeness, Travelling Salesman Problem JE: 30. NP Hardness		Quiz 7 HW 7 & Discussion
9 & 10	Ch 35 Approximation Algorithms	Review for Final Exam	Quiz 8 HW 8 & Discussion
11	Final Exam Opens Sunday at 8:00am and closes Wednesday at 11:59pm		

CLRS: Introduction to Algorithms, 2nd or 3rd Edition, Cormen, Leiserson, Rivest and Stein

KA: Khan Academy – Computer Science Algorithms created by Tom Cormen and Devin Balkcom

JE: Algorithms, Etc. by Jeff Erickson, <http://jeffe.cs.illinois.edu/teaching/algorithms/>