

Tentative Schedule CS 325-400 – Summer

Week	Topics & Readings from CLRS and JE	Supplements	Assignments
1	JE: 0. Introduction Ch 1: Role of Algorithms 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	Syllabus Quiz Week 1 - Quiz HW 1 & Discussion
2	Ch 4: Divide and Conquer JE: Appendix II: Solving Recurrences	KA: Recursive Algorithms Merge Sort	Week 2-Quiz HW 2 & Discussion
3	Ch 15: Dynamic Programming JE: 5. Dynamic Programming		Week 3-Quiz HW 3 & Discussion
4	Ch 16: Greedy Algorithms		Week 4-Quiz HW 4 & Discussion
5	Ch 22: Elementary Graph Algorithms Ch 23 Minimum Spanning Tree Ch 24: Shortest Path JE: Basic Graph Algorithms	KA: Graph representation Breadth-first search	Week 5-Quiz HW 5 & Discussion
6	Ch 29 Linear Programming	LINDO Software available at http://engineering.oregonstate.edu/computing/citrix/	Week 6-Quiz HW 6 & Discussion
7	Ch 34 NP Completeness, Travelling Salesman Problem JE: 30. NP Hardness		Week 7-Quiz HW 7 & Discussion
8	Ch 35 Approximation Algorithms		HW 8 Final: Thursday 8:00am – Sunday 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/>