

Tentative Schedule CS 325-400 – Fall 2017

Week	Topics & Readings from CLRS and JE	Supplements	Assignments Due at 11:59pm
0	CS 225 – Review materials JE: 0. Introduction Ch 1: Role of Algorithms		Intro Discussion & Syllabus Quiz Friday
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	HW 1 & Discussion Due Sunday
2	Ch 4: Divide and Conquer JE: Appendix II: Solving Recurrences	KA: Recursive Algorithms Merge Sort	HW 2 & Discussion Due Sunday
3	Ch 15: Dynamic Programming JE: 5. Dynamic Programming		HW 3 & Discussion Due Sunday
4	Ch 16: Greedy Algorithms		HW 4 & Discussion Due Sunday
5	Review for Midterm Midterm: Thursday 10/26/17 at 8:00am – 10/29/17 at Sunday 11:59pm.		
6	Ch 22: Elementary Graph Algorithms Ch 23 Minimum Spanning Tree Ch 24: Shortest Path	KA: Graph representation Breadth-first search JE: Basic Graph Algorithms	HW 5 & Discussion Due Sunday
7	Ch 29 Linear Programming	LINDO Software available at http://engineering.oregonstate.edu/computing/citrix/	HW 6 & Discussion Due Sunday
8	Ch 34 NP Completeness, Travelling Salesman Problem JE: 30. NP Hardness		HW 7 & Discussion Due Sunday
9	Ch 35 Approximation Algorithms		
10	Review for Final Exam		Project Due Friday at 11:59pm
Final Exam: Sunday 12/03/17 at 8:00am – 12/06/17 at Wednesday 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://web.engr.illinois.edu/~jeffe/teaching/algorithms/>