

## Tentative Schedule CS 325-400 – Fall 2018

Week	Topics & Readings from CLRS and JE	Supplements	Assignments Due at 11:59pm
0	Ch 1: Role of Algorithms JE: 0. Introduction		Syllabus Quiz Due
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	Midterm Review	<b>Midterm: Thursday 8:00am – Sunday 11:59pm.</b>	
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	HW 5 & Discussion Due Sunday
7	Ch 29 Linear Programming	LINDO Software available at <a href="http://engineering.oregonstate.edu/computing/citrix/">http://engineering.oregonstate.edu/computing/citrix/</a>	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		Thanksgiving Holiday
10	<b>Final Review</b>	<b>HW 8 Due Tuesday</b>	
11	<b>Final Sunday 8:00 am to Wednesday at 11:59pm</b>		

CLRS: Introduction to Algorithms, 2<sup>nd</sup> or 3<sup>rd</sup> 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/>