Tentative Schedule CS 325-400

Week	Topics & Readings from CLRS and JE	Supplements	Assignments Due at 11:59pm
1	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** **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	**Midterm: Thursday 8:00am – Sunday 11:59pm.**	
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 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		**HW 8 & Discussion** **Due Sunday**
10	**Final Review**		
11	**Final Sunday 8:00 am to 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/