

## Tentative Schedule CS 325H – Winter 2019

Week	Tuesday	Thursday
1	Ch 1: Role of Algorithms Ch 2: Getting Started Insertion Sort, Analyzing Algorithms, Designing Algorithms Ch 3: Growth of Functions	Ch 3: Growth of Functions cont.  <b>Activity 1</b>
2	Ch 4: Divide and Conquer  <b>HW 1 – Due at 11:59pm</b>	Ch 4: Solving Recurrences JE: Appendix II: Solving Recurrences <b>Activity 2</b>
3	Ch 15: Dynamic Programming JE: 5. Dynamic Programming  <b>HW 2 - Due at 11:59pm</b>	More DP
4	More DP  <b>Activity 3</b> <b>HW 3 - Due at 11:59pm</b>	Ch 16: Greedy Algorithms
5	Greedy Algorithms  <b>Activity 4</b>	Ch 22: Elementary Graph Algorithms. BFS & DFS  JE: Basic Graph Algorithms <b>HW 4 - Due at 11:59pm</b>
6	Ch 23 Minimum Spanning Tree Ch 24: Shortest Path	Graph Algorithms cont.  <b>Activity 5</b> <b>HW 5 - Due at 11:59pm</b>
7	Ch 29 Linear Programming	Ch 29 Linear Programming  <b>Activity 6</b>
8	Ch 34 NP Completeness JE: 30. NP Hardness  <b>HW 6 - Due at 11:59pm</b>	NP-Complete Problems
9	NP Complete Problems & Approximation Algorithms <b>Activity 7</b> <b>HW 7 - Due at 11:59pm</b>	Ch 35 Approximation Algorithms
10	<b>UVA Online Judge Problems</b>	<b>Presentations</b>

**Final report due Friday March 22<sup>nd</sup> at 9:30 am.**

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

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