CS163: Course Plan

Summer 2020

(The following dates are subject to change!)

Date	Topic #	Required Videos to Watch(*)	Reading Assigned In Carrano	Linux Manual (outside of lab)	Lab Performed
Week #1	Topic #1 – Data Abstraction	Topic #1 Part I, II	Carrano: Chapters	Linux #2.1	CS163 Lab #1
June 22-26	 Topic #2 – Building an ADT 	Topic #2 Part I, II	1,2		
Week #2 June 29-July 2	 Topic #3 – An Example of an ADT Experience Lab #2 in Live session Practice with Recursion 	Topic #3 Part I, II	Carrano: Chapters 3, 4 and 5		NO LAB (4 th of July Holiday)
Week #3 July 6-10	 Topic #4 – Stack and Queues Topic #5 – Doubly linked and Circular linked lists Midterm #1 on 7/9 	Topic #4 Part I, II, III Topic #5 Video	Chapters 6 and 7	Linux #2.2, 2.3	CS163 Lab #3
Week #4 July 13-17	 Topic #7 – Efficiency Topic #6 – Hash Tables Midterm Demos 7/17, retakes 7/24 	Topic #7 Video Topic #6 Video	Chapter 10, 18.4	Linux #2.4, 2.5	CS163 Lab #6
Week #5 July 2024	 Topic #8 – Trees Topic #9 – Insert, Removal 	Topic #8 Part I, II Topic #9 Part I, II, III	Chapter 15, 16	Linux #2.6, 2.7	CS163 Lab #7
Week #6 July 27-31	 Topic #9 – Tree Efficiency Topic #11 – Graphs Midterm #2 on 7/30 	Topic #9 IV, V Topic #11 on graphs	Chapter 19 (balanced) Chapter 20 (graphs)	Linux #2.8	CS163 Lab #8
Week #7 August 3-7	 Topic #10 – Advanced Trees Topic #11 - Heaps 	Topic #10 Part I, II Topic #10-11 heaps and b-trees	Chapter 21.3, 21.5 Chapter 17 (heaps)	Linux #2 Review	CS163 Lab #10
Week #8 August 10-14	 Topic #12 – Iterative sorts Topic #13 – Recursive sorts Final Exam on 8/13 Final proficiency demos on 8/14 	Topic #12 Iterative Topic #13 Recursive	Chapter 11		Final Proficiency Demos (no lab)

^(*) Videos <u>must</u> be watched <u>prior</u> to the live streaming sessions