CS14: Data Structures

Instructors

Role	Name	Email	Office Hours
Lecturer	Mike Izbicki	mike@izbicki.me	Thursday, 9-11AM, WCH 110
TA	Steve Cook	scook005@cs.ucr.edu	Wednesday, 1-2PM, WCH 364
TA	Jing Ping	pingjing1988@gmail.com	Tuesday 11AM-12PM, WCH 110
TA	Santosh Sangalad	ssang001@ucr.edu	Mondays 2:30-3:30PM in WCH 110
SI	Daniel de Haas	ddeha001@ucr.edu	N/A
SI	Chris Manghane	cmang001@student.ucr.edu	N/A

Grades

Category	Percent
Quizes	5
Labs	15
Homework	20
Midterm 1	15
Midterm 2	20
Final	25

Quizes will be held randomly, with 1-3 quizes per week. There will be an optional oral test, worth up to 2 percent of extra credit. Obviously, cheating of any sort will not be tolerated. The policy is the same as CS12: no collaborating on homework assignments. Collaboration in lab is encouraged.

Tentative Schedule

Week	Day	Date	Lecture Topic	Graded Material Due
1	Monday	April 1	Introduction	
	Wednesday	April 3	Asymptotic complexity	
	Friday	April 5	Abstract data types	
2	Monday	April 8	Linear data structures 1 (queues/stacks)	
	Wednesday	April 10	Linear data structures 2 (immutability)	Homework 1
	Friday	April 12	Sorting review (insertion, selection, bubble)	
3	Monday	April 15	Quicksort	
	Wednesday	April 17	Review	
	Friday	April 19	**EXAM**	Midterm 1
4	Monday	April 22	Trees -	
	Wednesday	April 24	Searching trees (breadth/depth first search)	Homework 2
	Friday	April 26	Binary search trees	
5	Monday	April 29	Red-black trees	
	Wednesday	May 1	Priority queues	
	Friday	May 3	Heaps (List, Binary, Fibonacci)	
6	Monday	May 6	Heaps 2	
	Wednesday	May 8	Hash tables	Homework 3
	Friday	May 10	Binning strategies	
7	Monday	May 13	More tree problems	
	Wednesday	May 15	Review	
	Friday	May 17	**EXAM**	Midterm 2
8	Monday	May 20	Graphs: intro (directed/undirected, basic problems)	
	Wednesday	May 22	Graphs: representations (Adjacency matrix / list)	Homework 4
	Friday	May 24	Spanning tree (Prim)	
9	Monday	May 27	Spanning tree (Kruskal)	
	Wednesday	May 29	Shortest path (Dijkstra)	
	Friday	May 31	Searching, A*	
10	Monday	June 3	More graph problems	
	Wednesday	June 5	More graph problems	Homework 5
	Friday	June 7	Review	