I&C SCI 46 Fall 2022 Projected Schedule

Note that this is a *projected* schedule and is subject to change. All reading is in the required Zybook textbook and is available on that site. There are 14 required reading assignments in that book.

All assignments: programming projects, reading, and problem sets, are due at **7:30 AM**. Late submissions are allowed up to 99 hours late for programming projects after (but not including) project 0, but not for problem sets or for reading.

If there is a discrepancy between the due date listed in the syllabus and the due date written on an assignment, the one on the assignment is the one to follow.

If you need a review of C++ or object oriented programming, please consider reviewing that early. It is expected that you are able to perform dynamic memory allocation, at least to the point where you could program a simple Linked List, given notes on the concept (but not detailed code). You should also have seen, and be able to write, simple uses of O notation, at least at the ICS 33 level.

Week	Date	Topic	Planned Due Dates
0	Sept 23	Introduction, recursion as a problem-solving technique	
1	Sept 26		
	Sept 28		First Zybook reading due 9/28
	Sept 30	Intro to Graphs	Project 0 due 9/30.
2	Oct 3	Graph Traversals	PS1 due 10/3
	Oct 5	Using graphs to solve problems	
	Oct 7	Analysis of Algorithms	
3	Oct 10	Skip Lists	Project 1 due 10/10, PS2 due 10/10
	Oct 12	**Exam 1**	
	Oct 14	Intro to hashing	
4	Oct 17	Hash Tables	
	Oct 19	Additional topics in hash tables	Project 2 due 10/19
	Oct 21	Additional topics in hash tables	PS3 due 10/21
5	Oct 24	Introduction to Binary Search Trees	
	Oct 26	Height balance in binary search trees	Project 3 due 10/26
	Oct 28	Maintaining balance in binary search trees	
6	Oct 31	Additional topics about balanced binary search trees	PS4 due 10/31
	Nov 2	**Exam 2**	Project 4 Checkpoint due 11/1

	Nov 4	Heaps and Priority Queues	
7	Nov 7	Heaps and Priority Queues	Project 4 due 11/7
	Nov 9	Elementary graph algorithms	
Friday Nov 11: Veterans' Day Holiday			
8	Nov 14	Elementary graph algorithms	
	Nov 16	Applied graphs	Project 5 due 11/16
	Nov 18	**Exam 3**	PS5 due 11/16
9	Nov 21	Sorting: Inversion Removal	
	Nov 23	Sorting: Inversion Removal	
Nov 24-25 : Thanksgiving Holiday			
10	Nov 28	Better ways to sort: Divide and Conquer	
	Nov 30	Better ways to sort: Divide and Conquer	PS6 due 12/2
	Dec 2	Additional Topics in Sorting	Project 6 due 12/2
Final Exam: Monday Dec 5. If you are enrolled in the 08:00 - 08:50 lecture, you must attend the 08:00 - 10:00 final exam. If you are enrolled in the 10:00 - 10:50 lecture, you must attend the 10:30 - 12:30 final exam.			