

Tentative Syllabus

This is a tentative syllabus for the course. It will be updated during the semester to reflect our actual progress in the course.

Lec.	Date	Topic	Assignments
<i>Week 1</i>			
Lec 1	T Sep 03	course overview; administrivia; object/method review	Start learning Linux/Emacs
	R Sep 05	Linux/Emacs/Java-in-Linux tutorial given by Stella 6:30-8pm in the mini-mini-focus.	PS1 out
Lec 2	F Sep 06	array review	
<i>Week 2</i>			
Lab 1	M Sep 09	objects, methods, arrays, testing	
Lec 3	T Sep 10	text: characters, strings, string buffers, files; APIs	
	R Sep 12		PS1 due; PS2 out
Lec 4	F Sep 13	interfaces; enumerations	
<i>Week 3</i>			
Lab 2	M Sep 16	text; enumerations; program development and testing	
Lec 5	T Sep 17	data abstraction: playing cards	
	R Sep 19		PS2 due; PS3 out
Lec 6	F Sep 20	vectors	
<i>Week 4</i>			
Lab 3	M Sep 23	cards; vectors	
Lec 7	T Sep 24	data abstraction: multiple implementations	
	R Sep 26		PS3 due; PS4 out
Lec 8	F Sep 27	linked lists	
<i>Week 5</i>			
Lab 4	M Sep 30	multiple implementations; lists	
Lec 9	T Oct 1	binary trees	
	R Oct 3		PS4 due; Exam1 out
Lec 10	F Oct 4	binary search trees	

Lec.	Date	Topic	Assignments
<i>Week 6</i>			
Lab 5	M Oct 7	trees	
Lec 11	T Oct 8	sorting; performance comparison	
	R Oct 10		Exam1 due
Lec 12	F Oct 11	algorithmic complexity & recurrences 1	
<i>Week 7</i>			
	M Oct 14	No lab: Fall break	
	T Oct 15	No lecture: Fall break	
	W Oct 16		PS5 out
Lec 13	F Oct 18	algorithmic complexity & recurrences 2	
<i>Week 8</i>			
Lab 6	M Oct 21	sorting; algorithmic complexity & recurrences	
Lec 14	T Oct 22	stacks, queues, priority queues: APIs & use	
	R Oct 24		PS5 due; PS6 out
Lec 15	F Oct 25	stacks, queues, priority queues: linear implementations	
<i>Week 9</i>			
Lab 7	M Oct 28	stacks, queues, priority queues	
	T Oct 29	No lecture: Tanner Conference	
Lec 16	F Nov 1	sets, bags, tables: APIs & use	
<i>Week 10</i>			
Lab 8	M Nov 4	sets, bags, tables: use and implementation	PS6 due; PS7 out
Lec 17	T Nov 5	sets, bags, tables: linear implementations	
Lec 18	F Nov 8	sets, bags, tables: BST implementations	
<i>Week 11</i>			
Lab 9	M Nov 11	sets, bags, tables: implementations	
Lec 19	T Nov 12	balanced trees: 2-3 tree	
	R Nov 14		PS7 due; Exam2 out
Lec 20	F Nov 15	priority queue implementation: leftist heaps	

Lec.	Date	Topic	Assignments
<i>Week 12</i>			
Lab 10	M Nov 18	balanced trees and heaps	
Lec 21	T Nov 19	hash tables	
Lec 22	F Nov 22	rose trees	
<i>Week 13</i>			
Lab 11	M Nov 25	hash tables; rose trees	Exam2 due
Lec 23	T Nov 26	tries; LZ78 compression (don't skip this class!)	
	F Nov 29	No lecture: Thanksgiving break	
<i>Week 14</i>			
Lab 12	M Dec 2	compression; Huffman coding	PS8 out
Lec 24	T Dec 3	graphical user interfaces (GUIs): layout	
Lec 25	F Dec 6	graphical user interfaces (GUIs): behavior	
<i>Week 15</i>			
Lab 13	M Dec 9	GUIs	
Lec 26	T Dec 10	Jeopardy!	PS8 due