CS230 Data Structures
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Wellesley College

Handout # 2
September 7, 2004

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.

Class	**Date**	**Topic**	**Homework**
		Week 1	
*Lab*1	T 9/7	Linux/Emacs/Java	
Lec1	R 9/9	course overview; Linux, Java, etc.; game of Set; administrivia	PS1 out (Set game; text)
		Week 2	
Lec2	M 9/13	text processing: characters, strings, string buffers	
*Lab*2	T 9/14	debugging	
Lec3	R 9/16	arrays and vectors 1	PS1 due at midnight; PS2 out (arrays and vectors)
		Week 3	
Lec4	M 9/20	(Stella) arrays and vectors 2	
*Lab*3	T 9/21	arrays and vectors	
Lec5	R 9/23	enumerations 1	
	F 9/24		PS2 due; PS3 out (enumerations)
		Week 4	
Lec6	M 9/27	enumerations 2	
*Lab*4	T 9/28	enumerations	
Lec7	T 9/30	I/0; exceptions; anonymous classes	
	F 10/1		PS3 due; PS4 out (lists)
		Week 5	
Lec8	M 10/04	object lists (immutable) and sorting	
*Lab*5	T 10/05	immutable lists	
Lec9	R 10/07	object lists (mutable) and sorting	

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Week 6			
	M 10/11	**Fall Break: no lecture**	
*Lab*6	T 10/12	mutable lists	
Lec10	W 10/13	**(Monday schedule)** ADTS; multiple implementations; interfaces vs. abstract classes	
Lec11	R 10/14	stack, queue & pqueue interfaces; stack implementations	
	F 10/15		PS4 due; Exam 1 out
Week 7			
Lec12	M 10/18	queues and pqueues: linear implementations	
*Lab*7	T 10/19	ADT implementations	
Lec13	R 10/21	inheritance; collection hierarchy	
	F 10/22		Exam 1 due; PS5 out (linear implementations)
Week 8			
Lec14	M 10/25	binary trees	
*Lab*8	T 10/26	collection hierarchy	
Lec15	R 10/28	project overview; binary search trees	
	F 10/29		PS5 due; PS6 out (tree implementations)
Week 9			
Lec16	M 11/01	set, bag, & table interfaces	
*Lab*9	T 11/02	trees	
Lec17	R 11/04	set, bag, & table implementations	
	F 11/05		Project Phase 1 due: project proposal
Week 10			
Lec18	M 11/08	graphical user interfaces (GUIs) 1	
	T 11/09	**Tanner conference: no lab**	
	W 11/10		PS6 due; Exam 2 out
Lec19	R 11/11	GUIs 2	

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		Week 11	
Lec20	M 11/15	putting it all together: sketchpad	
*Lab*10	T 11/16	GUIs	
	W 11/17		Exam 2 due
Lec21	R 11/18	asymptotic complexity 1	
		Week 12	
Lec22	M 11/22	asymptotic complexity 2	
*Lab*11	T 11/23	asymptotic complexity	Project Phase 2 due: program outline
	R 11/25	**Thanksgiving: no lecture**	
		Week 13	
Lec23	M 11/29	2-3 trees	PS7 out (efficient data structures)
*Lab*12	T 11/30	efficient data structures	
Lec24	R 12/02	heaps	
	F 12/03		Project Phase 3 due: detailed program skeleton
		Week 14	
Lec25	M 12/06	hash tables	
*Lab*13	T 12/07	informal presentations in lab	Project Phase 4 due: informal presentations
Lec26	R 12/09	Where to go from here?	
Lec27	F 12/10		PS7 due
		Week 15	
	T 12/14		Project Phase 5 due: code review
		Week 16	
	T 12/21		Project Phase 6 due: demonstration and final program