

## Syllabus for CS 172, Section A, Fall, 1998

R. Brown

	<i>Date</i>	<i>Reading</i>	<i>Topics started</i>
1	Fri. 9-11		In-class demonstration
2	Mon. 9-14	Ch 1	Functions, naming. Components of a computer
3	Wed. 9-16		Describing functions (specs), special forms. Types of data
4	Fri. 9-18	Ch 2	Lists
5	Mon. 9-21		Conditional expressions involving lists
6	Wed. 9-23	Ch 3	Creating functions with <code>lambda</code> . Specs, revisited
7	Fri. 9-25		<code>lambda</code> , contin.
8	Mon. 9-28	Ch 4	Recursion with lists
9	Wed. 9-30		Tracing
10	Fri. 10-2		Recursion with numerical data
	Mon. 10-5		<i>Review</i>
	Wed. 10-7		<i>Exam 1</i>
11	Fri. 10-9	Ch 5	Linear and non-linear recursion
12	Mon. 10-12		Programming applications. Tail recursion
13	Wed. 10-14	Ch 6	Writing tail-recursive functions
14	Fri. 10-16		Iteration. System stack
15	Mon. 10-19		Iteration, continued
16	Wed. 10-21	Ch 7	Binding and scope
17	Fri. 10-23		Environment diagrams. <code>let</code> and <code>lambda</code>
	Mon. 10-26		<i>Fall break</i>
18	Wed. 10-28	Ch 8	Higher-order functions, procedural abstraction
19	Fri. 10-30		Programming with higher-order functions
20	Mon. 11-2		Desirable qualities of procedural abstraction
	Wed. 11-4		<i>Review</i>
	Fri. 11-6		<i>Exam 2</i>
21	Mon. 11-9	Ch 9	Input/output; files.
22	Wed. 11-11	Ch 10	Assignment and state. Memory model
23	Fri. 11-13		Environment diagrams, revisited
24	Mon. 11-16		Imperative programming, functional programming
25	Wed. 11-18	Ch 11	Lists, revisited (at low level)
26	Fri. 11-20		Imperative programming with lists
27	Mon. 11-23	Ch 14	Object-oriented programming: terminology, using objects
	Wed. 11-25		<i>Thanksgiving</i>
	Fri. 11-27		<i>Thanksgiving</i>
28	Mon. 11-30		Specs for classes. Implementation of an object system
	Wed. 12-2		<i>Review</i>
	Fri. 12-4		<i>Exam 3</i>
29	Mon. 12-7		Programming with objects
30	Wed. 12-9	Ch 15	Applications of object technology
	Fri. 12-11		<i>Review</i>