

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	Homework
<i>Week 1</i>			
1	T 1/30	course overview; administrivia; interpretation and compilation	
2	W 1/31	introduction to OCAML	PS1 out (interpretation/ compilation; simple OCAML)
3	F 2/02	OCAML list recursion	
<i>Week 2</i>			
4	T 2/06	first-class functions; the substitution model	
5	W 2/07	higher-order list functions 1	PS1 due; PS2 out (list recursion)
6	F 2/09	higher-order list functions 2	
<i>Week 3</i>			
7	T 2/13	functional data	
8	W 2/14	OCAML modules	PS2 due; PS3 out (higher-order functions)
9	F 2/16	sum-of-product datatypes; trees; s-expressions	
<i>Week 4</i>			
10	T 2/20	simple interpretation (INTEX)	
11	W 2/21	a stack language (POSTFIX)	PS3 due; PS4 out (simple interpretation)
12	F 2/23	simple compilation	
<i>Week 5</i>			
13	T 2/27	simple naming (BINDEX)	
14	W 2/28	extending BINDEX	
15	F 3/02	primitives and desugaring (VALEX)	PS4 due; PS5 out (naming, desugaring)
<i>Week 6</i>			
16	T 3/06	functions and scoping (HOFL)	
17	W 3/07	environment model; closures	
18	F 3/09	recursive bindings	PS5 due; PS6 out (functions, environments)

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<i>Week 7</i>			
19	T 3/13	Scheme	
20	W 3/14	restricting functions (FOFL, FOBS)	PS6 due
21	F 3/16	compound data: products, sums, algebraic datatypes	
	3/17-25	Spring Break	
<i>Week 8</i>			
22	T 3/27	imperative programming (HOILEC,HOILIC)	PS7 out (restricted functions;state)
23	W 3/28	interpreting state	
24	F 3/30	object-oriented programming	
<i>Week 9</i>			
25	T 4/03	parameter passing	
26	W 4/04	C data	PS7 due; PS8 out (OOPS;parameters;GC)
27	F 4/06	storage management	
<i>Week 10</i>			
28	T 4/10	lazy data	
29	W 4/11	HASKELL 1	PS8 due; PS9 out (lazy data; HASKELL)
30	F 4/13	HASKELL 2	
<i>Week 11</i>			
	T 4/17	Monday schedule: no lecture	
31	W 4/18	type checking 1	PS9 due; PS10 out (type checking)
32	F 4/20	type checking 2	
<i>Week 12</i>			
33	T 4/24	polymorphism	
34	W 4/25	type reconstruction 1	PS10 due; PS11 out (type reconstruction)
35	F 4/27	type reconstruction 2	
<i>Week 13</i>			
36	T 5/01	control 1: non-local exits	
	W 5/02	Ruhlman conference; no lecture	PS11 due; PS12 out (control)
37	F 5/04	control 2: exceptions	
<i>Week 14</i>			
38	T 5/08	nondeterministic programming; logic programming	
39	W 5/09	CS251 Jeopardy!	PS12 due