

Topic: Review

**Reading:** No new reading; study for the final.

- Go over first-day handout about abstraction; show how each topic involves an abstraction barrier and say what's above and what's below the line.
- Go over the big ideas within each programming paradigm:

**Functional Programming:**

composition of functions  
first-class functions (function as object)  
higher-order functions  
recursion  
delayed (lazy) evaluation  
(vocabulary: parameter, argument, scope, iterative process)

**Object-Oriented Programming:**

actors  
message passing  
local state  
inheritance  
identity vs. equal value  
(vocabulary: dispatch procedure, delegation, mutation)

**Logic Programming:**

focus on ends, not means  
multiple solutions  
running a program backwards  
(vocabulary: pattern matching, unification)

- Review where 61A fits into the curriculum. (See the CS abstraction hierarchy in week 1.)

Please, please, don't forget the ideas of 61A just because you're not programming in Scheme!