

CS 3520: Programming Languages

Fall 2017	Language	Assignment (due at end of week)
Aug 21-25	Standard ML	
Aug 28-Sep 1		Standard ML
Sep 5-8 (<i>Labor Day</i>)		Standard ML
Sep 11-15	Simple interp	Standard ML
Sep 18-22	Lisp interp	Simple interp
Sep 24-29	Scheme interp	Lisp interp
Oct 2-6		Scheme interp
Oct 9-11 (<i>Fall Break</i>)	Prolog	
Oct 16-20		Prolog
Oct 23-27		Prolog
Oct 30-Nov 3	Forth	
Nov 6-10	Lua	
Nov 13-17		Lua
Nov 20-21 (<i>Thanksgiving</i>)	Forth	
Nov 27-Dec 1		
Dec 4-7		Forth

Changes to the schedule will be announced in class.

Resources

- [Syllabus](#)
- [Examples from class](#)
- [ML slides](#)
- [Prolog slides part 1](#) (first look, rules, operators, lists)
- [Prolog slides part 2](#) (second look, unification, execution model, adventure game)
- [Prolog slides part 3](#) (cost models)
- [Prolog slides part 4](#) (third look, numeric computation, knapsack, 8-queens)
- [Go tour](#)
- [Go concurrency patterns \(52 minute video\)](#)
- [Go: Performance without the event loop](#)
- [Lua 5.1 Reference Manual](#)
- [Learn X in Y minutes: Lua](#)
- [Lua: Passing a Language through the Eye of a Needle](#)
- [Easy Forth](#)
- [Starting Forth](#)
- [jonesforth \(assembly part\)](#)
- [jonesforth \(forth part\)](#)

Assignments

Assignments are due at the end of the week they are assigned. The official deadline is 7:00 am on Monday morning of the following week.

Submit all work via Canvas unless otherwise instructed.

- Standard ML assignments can be found in CodeGrinder
 - The first ML assignment is also [available here](#).
- The starter kit for the simple interpreter is [available here](#)
- Prolog assignments can be found in CodeGrinder
- [Lua Markov babblers \[html\]](#) [\[pdf\]](#)
- [Forth missionaries and cannibals assignment \[html\]](#) [\[pdf\]](#)

- The first Go assignment can be found in CodeGrinder
 - [Go lift simulator \[html\]](#) [\[pdf\]](#)
-

Final project languages

In place of a final exam, each student will learn one additional language, write some code in that language, and present it to the rest of the class. Here are a few potential choices:

- Algol
- Fortran
- Cobol
- Factor
- Smalltalk or Self
- Common Lisp or Scheme
- Haskell
- OCaml or F#
- Clojure
- Scala
- Rust
- Perl
- Erlang or Elixir
- APL or J
- Eiffel