

School of Computer Science
McGill University
Course Syllabus

COMP 302: Programming Languages and Paradigms

Instructor: Mark Mercer
Time: Tu 11:05 -13:25 Th 11:05 - 12:55
Room: McConnell Rm 13
Webpage: www.cs.mcgill.ca/~cs302

Teaching Assistants

As the TAs are currently on strike, there will be no TAs for this course. You may wish to speak with one of the lab consultants if you need some assistance.

Office Hours

Two hours after each class. I'm also happy to meet with people outside of these hours by appointment.

Textbook

There will be class notes for the course, which will be available on the web. We will also use the handbook *Introduction to SML* by Robert Harper, linked on the course homepage.

Credits

3 Units

Assessment

3 Assignments	- 15%
2 Quizzes	- 5%
1 Midterm	- 25%
1 Final	- 55%

Supplementary Material

- Concepts in programming languages, John Mitchell, Cambridge University Press, 2003.
- Essentials of programming languages, D. P. Friedman, M. Wand, C. T. Haynes. MIT Press, 2001.

- Structure and interpretation of computer programs, H. Abelson, G. J. Sussman, MIT Press, 1996.
- Types and programming languages, Benjamin C. Pierce MIT Press, 2002.

Schedule

Date	Lecture
1 May	Introduction, Basic SML, Functions, Recursion
6 May	Functions, Tuples, Patterns, Lists
8 May	Concrete data types, induction
13 May	Recursive data types, Higher-Order functions
15 May	Higher-Order functions, Continuations, References
20 May	More SL functions; Formal Syntax
22 May	Operational Semantics
27 May	Types
29 May	Types, Review
3 June	Midterm
5 June	Lambda Calculus
10 June	Modules, Closures
12 June	The Environment Model
17 June	Lazy Programming
19 June	Java, Subtyping
24 June	TBA
26 June	REVIEW

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