CMPT 383 - D100 Programming Langs.

Instructor(s): Toby Donaldson

Calendar Objective/Description:
Programming Langs.

Instructor's Objectives:
A practice-oriented exploration of concepts and principles underlying the design and use of modern programming languages, including
object-oriented programming and functional programming. Approximately every two weeks a new language will be discussed, such as LISP,
Ruby, Haskell, Go, and Prolog.

Prerequisites:
see go.sfu.ca

Topics:
- Introduction to fundamental programming ideas and approaches
- Go: procedures and concurrency
- LISP (using Racket): lists, functional programming, and interactive programming
- Haskell: functional programming with types
- Ruby: dynamic and practical object-oriented language
- Prolog: logic programming

Grading:
The marking scheme will be provided in the first week of class.

Recommended Books:
Thinking Functionally with Haskell, Richard Bird, Cambridge University Press, 2014, 9781107452640, Excellent introduction to
Haskell and functional programming.


Reference Books:
Programming Language Pragmatics, Michael L. Scott, Morgan Kaufmann, 2015, 9780124104099, General discussion of a
wide variety programming language topics.

Academic Honesty Statement:
Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are
advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct
Policies (http://www.sfu.ca/policies/gazette/student.html).