

CMPT 383 Comparative Programming Languages

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See course web page for e-mailing guidelines

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Course Description

- ◆ Catalog Description.
 - Various concepts and principles underlying the design and use of modern programming languages are considered in the context of different paradigms. Topics include syntax, formal semantics, modularity, abstraction, polymorphism, data structures, etc.

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Prerequisites

- ◆ CMPT 201 or 225, MACM 101 (minimum C- in all prerequisites courses).
- ◆ You already know:
 - Abstract data types: modularization, encapsulation, information hiding
 - Data structures
 - Control structures
 - Object-oriented design and programming
 - Java, C++

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What will you learn?

- ◆ Survey of major programming paradigms (including representative languages).
- ◆ Language definition and description methods (syntax and semantics).
- ◆ Overview of features across all languages.
- ◆ Implementation strategies.

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Topic Overview

- ◆ Introduction
- ◆ Syntax and Semantics
- ◆ Programming Language Fundamentals
- ◆ Object Oriented Programming
- ◆ Functional Programming
- ◆ Logic Programming
- ◆ Advanced Topics

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Textbook



- ◆ *Concepts of Programming Languages*
Robert W. Sebesta
7th edition
Addison-Wesley, 2005

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Course Work and Grading

- ◆ Midterm: 20%
- ◆ Final Exam: 35%
- ◆ Assignments: 35%
(a combination of programming and written assignments)
- ◆ Pop Quizzes: 10%

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- ❖ In order to obtain a clear pass (C- or better) your weighted combined score on the quizzes, midterm and final exam must exceed 50%
- ❖ Lowest-grade rule: You may have unpredictable circumstances that will not allow you to meet a deadline or make a quiz. Since late assignments are not allowed and there are no makeup exams of quizzes, your lowest quiz and your lowest assignment will be dropped.
- ❖ Errors in grading: If you believe that an assignment or exam has not been graded properly, you have two weeks to see the TA or the instructor (you should talk first with the TA). Just remember that corrections may result in a grade being lowered or raised. After two weeks, your grade is set and will not be changed.

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Policy on assignments and collaboration

- ◆ Late assignments will not be accepted, except for medical reasons.
- ◆ Assignments will be collected at the start of the class on the day it is due.
- ◆ Your assignments are individual.
 - You are allowed to freely discuss ideas or approaches (without taking notes from the discussion).
 - Write the solution (or code) by yourself.

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Course Information

- ◆ Course web site
 - All information (course material, assignments, etc) will be posted on the CMPT 383 course web site @ <http://www.cs.sfu.ca/CC/383>
- ◆ Course e-mail
 - cmpt-383@sfu.ca
 - e-mails sent to this mailing list will reach the instructor, the TA and all CMPT 383 students in our class...use wisely.
- ◆ GradeBook
 - It is the student's responsibility to keep track of his/her performance using the GradeBook @ <https://gradebook.cs.sfu.ca/>

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Academic Honesty

- ◆ 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 are subject to disciplinary action by the School; serious infractions are dealt with in accordance with the Code of Academic Honesty (T10.02)
- ◆ Students are encouraged to read SFU's Code of Student Conduct and the School's Statement on Intellectual Honesty.

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