

SAMPLE COURSE OUTLINE

Course Code, Number, and Title:

CPSC 1150: Program Design

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 4.0 h + Seminar 0.0 h + Lab. 2.0 h

Credits: 3.0

Transfer Credit: For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

Program design entails building and implementing an algorithm in a programming language (such as Java) using good software development principles. Students develop problem-solving techniques while learning the basics of algorithm development, procedural abstraction, and data representation.

Students will receive credit for only one of CPSC 1150 or 1155.

Prerequisite(s): One of the following: MDT 85; a minimum "B" grade in Precalculus 12; one of MATH 1171, 1173/1183, 1174; a minimum "C" grade in one of CPSC 1040 or 1045; or a minimum "B" grade in CPSC 1050.

Learning Outcomes:

Upon successful completion of this course, students will be able to...

1. Represent data in various numbering systems
2. Design and develop an algorithm for a given problem
3. Utilize appropriate control structures and variables (including arrays) to implement a solution
4. Use procedural abstraction to implement structured programs
5. Trace, debug and test the correctness of code
6. Find and use appropriate libraries, resources and documentation
7. Write maintainable code in the current standard coding style of the programming language, including internal and external documentation
8. Describe given searching and sorting algorithms including their time complexity
9. Trace recursive functions

Instructor(s): TBA
Office: TBA
Office Hours: TBA

Phone: (604) 323-XXXX
Email: TBA

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

For textbook information, visit https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8

Note: *This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.*

Assessments and Weighting:**Final Exam****Other Assessments**

[An example of other assessments might be:]

Information unavailable, please consult Department for details.

Grading System:

Specific grading schemes will be detailed in each course section outline.

Information unavailable, please consult Department for details.

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

Information unavailable, please consult Department for details.

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

Departmental/Course Policies:

Information unavailable, please consult Department for details.

“This Sample Course Outline is for planning purposes only”.

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