

CS 1150

Programming with Data Structures

Prerequisites: CS 1140

Instructor(s): David Gregg

Office: E309 539-2976
gregg@gprc.ab.ca

Texts: An Introductory Java Programming Textbook (to be used as a reference for basic language and OOP concepts)

A Data Structures Textbook that uses Java for its examples

Recommended Data Structures Text:

Java Structures by Duane Bailey

or

Data Structures and Algorithms in Java (2nd Ed) by Goodrich and Tamassia

Evaluation:	Assignments	30%
	Quizzes (lecture and lab)	10%
	Midterm Exam	25%
	Final Exam	35%

Course Description:

The course provides a review of programming principles (specification, implementation and testing), and an extension of Object Oriented concepts from CS 1140 including data abstraction, modular program construction and program re-use. The emphasis is on dynamic data structures (strings, vectors, lists, stacks, queues, trees), and their associated algorithms (recursion, traversal, sorting, searching, hashing).

Course Format:

This course is three lecture hours and three lab hours per week.

To pass this course you must achieve an average of 50% on all Exams and Lab quizzes.