CS 1150
Programming with Data Structures
3(3-0-3) 90 hours
UT—UofA, Athabasca, UofC, UofL

Prerequisites: CS 1140

Instructor: David Gregg
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Office Hours: TBA and by prior arranged appointment

Texts: Introduction to JAVA Programming. Daniel Liang (You may use the 4th edition if you want, but the 5th and later editions will serve you better after the course is finished).

Class notes are to be used for subject material pertaining to data structures. Make good use of the on-line and library resources related to data structures. The topic of data structures is language independent so any data structures text should be sufficient.

Evaluation:

Assignments	20%
Quizzes	10%
Midterm Exam	30%
Final Exam	40%

Your final grade, calculated as a percentage, is converted to a letter grade as follows:

90 – 100	A+	
85 – 89	A	
80 – 84	A-	
76 – 79	B+	
73 – 75	B	
70 – 72	B-	
67 – 69	C+	
64 – 66	C	
60 – 63	C-	minimum acceptable grade for transfer to the UofA
55 – 59	D+	
50 – 54	D	minimal pass acceptable for GPRC
0 – 49	F	fail

BlackBoard: Your grades and other course information will be posted on BlackBoard: blackboard.gprc.ab.ca

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. When necessary, lab time will be utilized for lecturing on specific Java/algorithmic concepts and features. The remainder of lab time will generally be used as "hands-on" programming time.

Lab Materials: CD-R disks ,or memory stick (recommended) are required for the lab

Assignment Policy:

Assignments/Projects are to be handed in and/or demonstrated in the scheduled lab on the due-date. Late assignments/projects will be penalized by 50%. Late assignments/projects may not be accepted after the end of classes. Some assignments may be weighted differently than others.

Special Notes :

The Student will be eligible for a passing grade for the term, **only if** they obtain 40 out of a possible 80 marks (on exams and quizzes).