

DEPARTMENT OF SCIENCE

COURSE OUTLINE - FALL 2013

CS1140 – INTRODUCTION TO COMPUTING SCIENCE – 3 (3-0-3) 90 HOURS

INSTRUCTOR: Libero Ficocelli **PHONE:** 780 539 - 2825

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OFFICE HOURS: TBA

PREREQUISITE(S)/COREQUISITE: Pure Math 30

REQUIRED TEXT/RESOURCE MATERIALS:

Introduction to Java Programming 9th Edition, Comprehensive Version, By Y. Daniel Liang, Pearson Publishing ISBN 9th Edition 0-13-305057-2

CALENDAR DESCRIPTION:

An introduction to Computing Science in which you learn to solve simple problems by writing small computer programs in JAVA. This course presents a high-level object-oriented computing model based on objects as well as primitive data types, control structures and methods. It will be limited to basic elementary algorithms and techniques for constructing elegant and robust solutions to simple problems. The laboratories will offer you the opportunity to translate concepts presented in lectures into interesting application programs.

CREDIT/CONTACT HOURS: 3 (3-0-3) 90 Hours

DELIVERY MODE(S): In class lecture

OBJECTIVES (OPTIONAL):

- Know the requirements of getting a Java program to compile and run
- Be able to write code which performs small tasks
- Be able to build simpler operations into larger, integrated solutions
- Know how to debug programs (find and fix errors)
- Have experience organizing large sets of data
- Know how to design programs so that they are easy to maintain and update

TRANSFERABILITY: University of Alberta, University of Lethbridge, Athabasca University, Augustana Faculty (University of Alberta), Concordia University College, Grant MacEwan University, King's University College

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE					
GRADING CONVERSION CHART					
Alpha Grade	4-point	Percentage	Designation		
	Equivalent	Guidelines			
\mathbf{A}^{\dagger}	4.0	90 – 100	EXCELLENT		
Α	4.0	85 – 89			
\mathbf{A}^{-}	3.7	80 – 84	FIRST CLASS STANDING		
B [⁺]	3.3	77 – 79	FIRST CLASS STANDING		
В	3.0	73 – 76	GOOD		
B ⁻	2.7	70 – 72	GOOD		
C ⁺	2.3	67 – 69	SATISFACTORY		
С	2.0	63 – 66	JAHJFACIONI		

C_	1.7	60 – 62	
D ⁺	1.3	55 – 59	MINIMAL PASS
D	1.0	50 – 54	IVIIIVIIVIAL FASS
F	0.0	0 – 49	FAIL
WF	0.0	0	FAIL, withdrawal after the deadline

^{**} Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions.

Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

EVALUATIONS:

Lab Assignments 24%
Lab Exam 6%
Class Quizzes 10%
Midterm 25%
Final Exam 35%

STUDENT RESPONSIBILITIES:

- The Student must pass the theory/concepts portion of the course in order to obtain a passing grade for the term. In other words a student must obtain 38 out of a possible 76 points (50%) - which includes all components except the lab assignments.
- No late project assignments will be accepted. The student is responsible for adhering to all requirements as specified for each project assignment.
- When necessary lab time may be utilized for lecturing on specific Java features.
 The remainder of the lab time will generally be used as "hands-on" programming time.

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the Student Conduct section of the College Admission Guide at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/**

COURSE SCHEDULE/TENTATIVE TIMELINE:

Chapter 1 Introduction to Java

Chapter 2 Elementary Programming

Chapter 3 Selection Statements

Chapter 4 Loops

Chapter 5 Methods

Chapter 6 Single-Dimensional Arrays

Chapter 7 Multiple Dimensional Arrays

Chapter 8 Objects and Classes

Chapter 9 Strings

Chapter 10 Thinking in Objects

Selected topics from other chapters.

^{**}Note: all Academic and Administrative policies are available on the same page.