DEPARTMENT OF SCIENCE

COURSE OUTLINE – Fall 2015

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

DELIVERY MODE(S): In class lecture

PREREQUISITE(S)/COREQUISITE: Pure Math 30

REQUIRED TEXT/RESOURCE MATERIALS:
Introduction to Java Programming 10th Edition , Comprehensive Version,
By Y. Daniel Liang, Pearson Publishing
ISBN 10th Edition 0-13-376131-2

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.

LEARNING OUTCOMES:

- Be able to create, edit and run Java programs

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- Write Java code to solve small defined problems
- Transform simpler operations into larger, integrated solutions
- Be able to debug programs (find and fix errors)
- Be able to design programs so that they are easy to maintain and update

COURSE OBJECTIVES:

- Think about problems in a manner that allows them to be solved computationally
- Understand how computation is related to representation
- Understand your computations so that you can verify they are doing what you intend them to do
- Learn ways to specify and organize computations so that machines can perform them and others can understand them
- Understand the basic architecture of machines that make computation possible

COURSE SCHEDULE/TENTATIVE TIMELINE:

Chapter 1	Introduction to Java
Chapter 2	Elementary Programming
Chapter 3	Selection Statements
Chapter 4	Mathematical Functions and Strings
Chapter 5	Loops
Chapter 6	Methods
Chapter 7	Single-Dimensional Arrays
Chapter 8	Multiple Dimensional Arrays
Chapter 9	Objects and Classes
Chapter 10	Object Oriented Thinking

Selected topics from other chapters.

EVALUATIONS:

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

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	**4-point Equivalent**	**Percentage Guidelines**	**Designation**
A^+	**4.0**	**90 – 100**	**EXCELLENT**
A	**4.0**	**85 – 89**	
A^-	**3.7**	**80 – 84**	**FIRST CLASS STANDING**
B^+	**3.3**	**77 – 79**	
B	**3.0**	**73 – 76**	**GOOD**
B^-	**2.7**	**70 – 72**	
C^+	**2.3**	**67 – 69**	**SATISFACTORY**
C	**2.0**	**63 – 66**	
C^-	**1.7**	**60 – 62**	
D^+	**1.3**	**55 – 59**	**MINIMAL PASS**
D	**1.0**	**50 – 54**	
F	**0.0**	**0 – 49**	**FAIL**
WF	**0.0**	**0**	**FAIL, withdrawal after the deadline**

STUDENT RESPONSIBILITIES:

Refer to the College Policy on Student Rights and Responsibilities at www.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES

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- 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 College Student Misconduct: Academic and Non-Academic Policy at www.gprc.ab.ca/d/STUDENTMISCONDUCT

**Note: all Academic and Administrative policies are available at www.gprc.ab.ca/about/administration/policies/

UNIVERSITY TRANSFER (If applicable):

**** 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.**

Please refer to the Alberta Transfer guide for current transfer agreements: www.transferalberta.ca

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