



## **CALENDAR DESCRIPTION:**

This course provides an overview of computing science concepts for students with little or no programming background. Topics include representation of data, machine architecture, operating system concepts, properties of algorithms and computational problems, syntax of a high-level procedural programming language, basic data types and control structures. Students do introductory programming in this course.

## **LEARNING OUTCOMES:**

Students will be able to analyze simple problems, design algorithms and implement solutions in a high level language. They will have a basic knowledge of computer circuits, computer architecture, and systems software.

## **COURSE OBJECTIVES:**

Be able to analyze and design algorithms.

Have experience writing programs in high level languages.

Be introduced to the systems software, computer architecture and computer circuits that comprise computer systems.

## COURSE SCHEDULE/TENTATIVE TIMELINE:

1	Introduction and Chapter 1
2	Chapters 1 and 2
3	Chapter 2
4	Chapters 2 and 3
5	Midterm I (Chapters 1 - 3) and Chapter 4
6	Chapters 4 and 5
7	Chapter 5
8	Chapter 6
9	Midterm II (Chapters 4 - 6) and Chapter 9
10	Chapter 9
11	Chapter 9
12	Chapters 10 and 11
13	Chapters 7 and 8
	Final Exam (All Chapters listed above)

## EVALUATIONS:

Your final grade will be determined in the following manner:

Lab Assignments	25%
Midterm Exam I	20%
Midterm Exam II	25%
Final Exam	30%

**GRADING CRITERIA:** Your final Alpha Grade will be determined using the following approximate percentage conversion:

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

## **STUDENT RESPONSIBILITIES:**

Refer to the College Policy on Student Rights and Responsibilities at [www.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES](http://www.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES)

## **STATEMENT ON PLAGIARISM AND CHEATING:**

Refer to the College Student Misconduct: Academic and Non-Academic Policy at [www.gprc.ab.ca/d/STUDENTMISCONDUCT](http://www.gprc.ab.ca/d/STUDENTMISCONDUCT)

\*\*Note: all Academic and Administrative policies are available at [www.gprc.ab.ca/about/administration/policies/](http://www.gprc.ab.ca/about/administration/policies/)

## ***UNIVERSITY TRANSFER:***

**\*\* 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](http://www.transferalberta.ca)