



**DEPARTMENT OF SCIENCE**

**COURSE OUTLINE - CS2040**

**ALGORITHMS -FALL 2011**

**INSTRUCTOR: franco carlacci**  
**OFFICE: c422**  
**OFFICE HOURS:TBA**

**PHONE:780 539 2091**  
**E-MAIL:franco@carlacci.com**

**PREREQUISITE(S)/COREQUISITE:**

Prerequisite : cs1150, cs2720, ma1130

**REQUIRED TEXT/RESOURCE MATERIALS:**

Introduction to the Design and Analysis of Algorithms, 2<sup>nd</sup> Edition, Anany V. Levitin, Addison-Wesley; 2007.

I will also provide powerpoint slides on the website <http://www.carlacci.com>

**CALENDAR DESCRIPTION:**

The first course of a two course sequence on algorithm design and analysis stream, with the emphasis on the fundamentals such as searching, sorting and graph algorithms. Examples include divide and conquer, dynamic programming, greedy method, backtracking, and local search methods. Analysis techniques will be developed to aid in judging program efficiency.

**CREDIT/CONTACT HOURS: 3 credits ( 3-0-1) / 60 contact hours**

**DELIVERY MODE(S): classroom**

**OBJECTIVES (OPTIONAL):**

**TRANSFERABILITY:**

University of Alberta ,University of Calgary ,University of Lethbridge , Athabasca University , Augustana Faculty, University of Alberta , Concordia University College , GMU, King's University College

**\*\* 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**

**GRADING CRITERIA:**

<b>GRANDE PRAIRIE REGIONAL COLLEGE</b>		
<b>GRADING CONVERSION CHART</b>		
<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>
<b>A<sup>+</sup></b>	<b>4.0</b>	<b>90 – 100</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>B<sup>+</sup></b>	<b>3.3</b>	<b>77 – 79</b>
<b>B</b>	<b>3.0</b>	<b>73 – 76</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>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>D</b>	<b>1.0</b>	<b>50 – 54</b>
<b>F</b>	<b>0.0</b>	<b>0 – 49</b>
<b>WF</b>	<b>0.0</b>	<b>0</b>

## **EVALUATIONS:**

Assignments	: 20%
Quizzes	: 20%
Midterm	: 25%
Final	: 35%

Assignments that are less than one week late will be penalized 50%; assignments submitted after that period will receive a grade of 0. Please note that you must submit ALL assignments (even late ones!) if you want the assignment portion to count towards your final grade.

## **STUDENT RESPONSIBILITIES:**

1. Student are responsible for adhering to all requirements laid out in the assignments.
2. Students must attend all lectures/labs. A student missing more than 20% of classes/labs may be barred from writing the final exam.
3. Students must submit ALL assignments ( even late ones) if they want the assignment portion to count towards your final grade.

## **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/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

\*\*Note: all Academic and Administrative policies are available on the same page.

## **COURSE SCHEDULE/TENTATIVE TIMELINE: TBA**