



**DEPARTMENT OF SCIENCE**  
**COURSE OUTLINE - CS3790**  
**OPERATING SYSTEMS - FALL 2014**

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

**PHONE:**780 539 2091  
**E-MAIL:**fcarlacci@gprc.ab.ca

**PREREQUISITE(S)/COREQUISITE:**

Prerequisite : cs1150

**REQUIRED TEXT/RESOURCE MATERIALS:**

The text to be used in this course is :*Operating Systems Concepts , Internals and Design Principles, Eighth Edition* by William Stallings.

Also material for this course will be made available at <http://www.carlacci.com>.

**CALENDAR DESCRIPTION:**

You will be introduced to concepts and features commonly found in operating systems. Class discussion will concentrate on traditional operating system topics (processes, memory management, file systems, input/output) as well as distributed operating system topics (communication, synchronization, and distributed file systems). UNIX will be studied as an example of traditional and distributed operating systems.

**CREDIT/CONTACT HOURS: 3 credits ( 3-0-2) / 75 contact hours**

**DELIVERY MODE(S):** classroom

**OBJECTIVES (OPTIONAL):**

**TRANSFERABILITY:**

University of Alberta \*, University of Calgary , University of Lethbridge ,  
Athabasca University

\* An asterisk (\*) beside any transfer institution indicates important transfer information.  
Consult the Alberta Transfer Guide.

\*\* 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:**

GRANDE PRAIRIE REGIONAL COLLEGE		
GRADING CONVERSION CHART		
Alpha Grade	4-point Equivalent	Percentage Guidelines
A <sup>+</sup>	4.0	90 – 100
A	4.0	85 – 89
A <sup>-</sup>	3.7	80 – 84
B <sup>+</sup>	3.3	77 – 79
B	3.0	73 – 76
B <sup>-</sup>	2.7	70 – 72
C <sup>+</sup>	2.3	67 – 69
C	2.0	63 – 66
C <sup>-</sup>	1.7	60 – 62
D <sup>+</sup>	1.3	55 – 59
D	1.0	50 – 54
F	0.0	0 – 49
WF	0.0	0

## **EVALUATIONS:**

Assignments (takehome and labs)	: 50%
Midterm	: 15%
Final	: 35%

Assignments that are less than one week late will be penalized 20%; 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 College Policy on Student Misconduct

[https://www.gprc.ab.ca/files/forms\\_documents/Student\\_Misconduct.pdf](https://www.gprc.ab.ca/files/forms_documents/Student_Misconduct.pdf)

**Note : all Academic and administrative policies are available at**

<https://www.gprc.ab.ca/about/administration/policies/>

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

Computer System Overview  
Operating System Overview  
Process Description and control  
Threads  
Mutual Exclusion and Synchronization  
Deadlock and Starvation  
Memory Management  
Virtual Memory  
Uni and multiprocessor scheduling  
I/O management and Disk Scheduling  
File Management  
OS Security