UNIVERSITY OF THE FRASER VALLEY

ORIGINAL COURSE IMPLEMENTATION DATE: September 1993
REVISED COURSE IMPLEMENTATION DATE: September 2019
COURSE TO BE REVIEWED (six years after UEC approval)**:** February 2012
Course outline form version: 05/18/2018

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: COMP 340	**Number of Credits:** 3 Course credit policy (105)
Course Full Title: Operating Systems **Course Short Title:** *(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)*	
Faculty: Faculty of Professional Studies	**Department (or program if no department):** Computer Information Systems

Calendar Description:

An examination of computer operating system architecture. Students will gain an understanding of general as well as distinguishing features of various operating systems. Students are also expected to do some system programming on multi-user operating systems such as UNIX or LINUX.

Prerequisites (or NONE):	COMP 251 and admission to the Bachelor of Computer Information Systems degree or the Bachelor of Science with Computing Science major. Note: Students accepted to a CIS or Computing Science minor may register with permission of the department.
Corequisites (if applicable, or NONE):	
Pre/corequisites (if applicable, or NONE):	

Antirequisite Courses *(Cannot be taken for additional credit.)*
Former course code/number:
Cross-listed with:
Dual-listed with:
Equivalent course(s):
(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)

Typical Structure of Instructional Hours

Lecture/seminar hours	45
Tutorials/workshops	
Supervised laboratory hours	
Experiential (field experience, practicum, internship, etc.)	
Supervised online activities	
Other contact hours:	
Total hours	**45**

Labs to be scheduled independent of lecture hours: ☒ No ☐ Yes

Special Topics *(Double-click on boxes to select.)*
This course is offered with different topics:
☒ No ☐ Yes *(If yes, topic will be recorded when offered.)*

Independent Study
If offered as an Independent Study course, this course may be repeated for further credit: *(If yes, topic will be recorded.)*
☒ No ☐ Yes, repeat(s) ☐ Yes, no limit

Transfer Credit
Transfer credit already exists: *(See **bctransferguide.ca**.)*
☐ No ☒ Yes
Submit outline for (re)articulation:
☒ No ☐ Yes *(If yes, fill in transfer credit form.)*

Grading System
☒ Letter Grades ☐ Credit/No Credit

Maximum enrolment (for information only): 35

Expected Frequency of Course Offerings:
Annually *(Every semester, Fall only, annually, etc.)*

Department / Program Head or Director: Talia Q	**Date approved:**	December 2028
Faculty Council approval	**Date approved:**	December 7, 2018
Dean/Associate VP: Tracy Ryder Glass	**Date approved:**	December 7, 2018
Campus-Wide Consultation (CWC)	**Date of posting:**	February 22, 2019
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	March 1, 2019

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Describe the general features of different operating systems.
- Compare differences between operating systems.
- Evaluate the efficiency of various operating systems.
- Compare and contrast various techniques using operating systems for tasks such as scheduling and dealing with deadlocks.
- Demonstrate their understanding of operating systems in labs.

Prior Learning Assessment and Recognition (PLAR)

☒ Yes ☐ No, PLAR cannot be awarded for this course because

Typical Instructional Methods *(Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.)*

Lecture and lab.

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials *(If more space is required, download Supplemental Texts and Resource Materials form.)*

	Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1.	Stallings, W.	Operating System — Internals and Design Principles	☒	Pearson	
2.			☐		
3.			☐		
4.			☐		
5.			☐		

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

Typical Evaluation Methods and Weighting

Final exam:	30%	Assignments:	20%	Field experience:	%	Portfolio:	%
Midterm exam:	%	Project:	%	Practicum:	%	Other:	%
Quizzes/tests:	50%	Lab work:	%	Shop work:	%	Total:	100%

Details (if necessary):

Typical Course Content and Topics

Students taking this course will gain a comprehensive grounding in the area of multi-programmed operating systems, including an understanding of the theoretical and practical issues and problems in operating system design. While the course concentrates on the principles behind the design of all operating systems students will be expected to peruse appropriate literature in order to appreciate the design decisions adopted in various specific operating systems. As in any upper-level computing course, students will be expected to learn about some aspects of topic areas through reading assignments and self-directed research.