UNIVERSITY OF THE FRASER VALLEY

ORIGINAL COURSE IMPLEMENTATION DATE: January 2004
REVISED COURSE IMPLEMENTATION DATE: September 2019
COURSE TO BE REVIEWED (six years after UEC approval)**:** May 2018
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 445	**Number of Credits:** 3 Course credit policy (105)

Course Full Title: Web Server Installation and Maintenance
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:

Students will gain hands-on experience in installing and maintaining a web server. Both Internet and Intranet issues will be discussed. Maintenance issues such as system optimization and server activity monitoring will be explored. In addition, server and client security will be discussed.

Prerequisites (or NONE):	CIS 341 or COMP 390 (formerly CIS 390) 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:

- Display and interpret HTTP protocol communications dialogues.
- Install a web server.
- Configure and test web server access control mechanisms.
- Configure and test web server user authentication.
- Install, configure, and test web server activity logging and monitoring systems.
- Configure, test, and optimize web server performance.
- Install multiple web sites on a single server (virtual hosting).
- Install, configure, test, and optimize a secure (SSL) web server.
- Configure and test forward and reverse proxy servers.
- Plan and resolve DNS issues in a virtual hosting environment.
- Install and configure web-based applications.
- Implement and test basic scripting for server maintenance.

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/hands-on computer lab work.

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.	Laurie, B. & Laurie, P.	Apache The Definitive Guide	☒	O'Reilly Media	
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:	30%	Project:	20%	Practicum:	%	Other:	%
Quizzes/tests:	%	Lab work:	%	Shop work:	%	Total:	100%

Details (if necessary):

Typical Course Content and Topics

1. Introduction to the course
2. Networking for the World Wide Web
3. Introduction to UNIX/Planning your Web Server
4. Introduction to UNIX Continued
5. Web server installation and configuration
6. Web Server security aspects
7. Virtual Directories and Virtual Servers
8. Modules — Extending the ability of the Server
9. SSI, CGI, and Scripting
10. Logging and Troubleshooting
11. Web Server Monitoring and Performance Optimization