



## CIST-109 – Windows Administration 1

### Technology

**Effective Term & Year:** Fall 2024

**Course Outline Review Date:** 2029-03-01

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**Program Area:** Information Technology

#### **Description:**

In this course students will gain comprehensive knowledge and practical skills in Server Administration. They will be instructed on the methods of installing and configuring servers, as well as managing user accounts and administering Active Directory objects. Furthermore, students will go through the implementation of both IPv4 and IPv6 addressing schemes, enabling seamless communication across server and client environments.

Additionally, the curriculum will cover essential networking concepts such as DHCP and DNS. Students will learn how to effectively utilize these services within the Windows client and services environment, ensuring efficient network resource allocation and management. They will be equipped with troubleshooting techniques for resolving IPv4 network issues.

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#### **Program Information:**

This course is required for the first year of the Computer Information Systems Technology program.

**Delivery Methods:** Hybrid – On-campus (Face-to-Face) and Online

**Credit Type:** College of the Rockies Credits

**Credits:** 3

#### **Instructional Activity and Hours:**

**Activity**

**Hours**

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Classroom, Directed Studies or Online Instruction	20
Seminar/Tutorials	
Laboratory/Studio	40
Practicum/Field Experience	
Co-op/Work Experience	
Other	
Total	60

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**Course Requisites:**

- Completed or concurrently enrolled in:
  - [CIST101](#) – Computer Systems Administration (4)

**Prior Learning and Recognition: Yes**

Students are able to request formal recognition of their prior learning or experience outside the classroom. Challenge examination, portfolio-assisted assessment, work-based assessment or a combination of assessments that is appropriate to identify, assess, and recognize prior skills, competencies, and knowledge to achieve course credit. Tuition fees apply, refer to Policy [2.5.5 Prior Learning Assessment and Recognition \(PLAR\)](#) or contact an education advisor for more information.

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**Course Transfer Credit:**

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

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**Textbook Resources:**

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

20740WV (55382): Installation, Storage, And Compute With Windows Server Lab, XtremeLabs

Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

## Learning Outcomes:

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

- develop a comprehensive understanding of server administration principles and practices;
- gain practical skills in installing and configuring servers to meet organizational requirements;
- demonstrate proficiency in managing user accounts and administering Active Directory objects for efficient user management;
- implement IPv4 and IPv6 addressing schemes to facilitate seamless communication across diverse network environments;
- effectively utilize DHCP and DNS services within Windows client and server environments to optimize network performance;
- configure and manage Group Policies to enforce security measures within the Windows server network;
- understand and configure routing and remote access roles in Windows Server environments; and
- demonstrate and implement Disk Management strategies.

## Course Topics:

- Server installation and configuration
- User Account Management: DHCP (Dynamic Host Configuration Protocol) DNS (Domain Name System) Troubleshooting IPv4 Network Issues Network Performance Optimization Network Resource Allocation.
- Managing User, Group and security accounts.
- Network Security Measures
- Configure and Manage File Systems and storage technology.
- Group Policy Management.

See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.

## Evaluation and Assessments

### Assessment Type: On-Campus (face-to-face)

Assessment Type	% of Total Grade
Assignments/Labs	40%
Participation	5%

Project	25%
Final Exam	30%
Total	100%

### Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

**Evaluation Notes:** A grade of “D” grants credit, but may not be sufficient as a prerequisite for sequential courses.

#### Evaluation Notes Comments:

Please see the instructor’s syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments and use of electronic aids.

#### Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a “0” on the exam.

#### Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.1.4 Course Audit
- Policy 2.4.1 Credential Framework
- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Rights, Responsibilities and Conduct
- Policy 2.4.8 Academic Performance
- Policy 2.4.9 Student Feedback and Concerns
- Policy 2.4.11 Storage of Academic Works
- Policy 2.5.3 Student Appeal
- Policy 2.5.5 Prior Learning Assessment and Recognition (PLAR)

#### Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to

this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outlin