CIST-207 – Windows Administration 3

Technology

Effective Term & Year: Fall 2024
Course Outline Review Date: 2029-03-01

Program Area: Information Technology

Description:

In this coursestudents will advance their knowledge in managing and securing Windows-based network. The course covers a range of advanced topics including network services, load balancing, and file services, alongside an in-depth exploration of Active Directory features such as Certificate Services, Federation Services, and Rights Management Services. Additionally, students will learn dynamic access control, failover clustering, and strategies for disaster recovery and business continuity. This curriculum is designed to equip students with the skills required to design, implement, and manage resilient and secure Windows Server networks, ensuring efficient operation and protection of organizational assets.

Program Information:

This course is required for the second 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
Classroom, Directed Studies or Online Instruction	30

Seminar/Tutorials	
Laboratory/Studio	30
Practicum/Field Experience	
Co-op/Work Experience	
Other	
Total	60

Course Requisites:

- Completed the following:
    - CIST201 – Windows Administration 2 (3)

Flexible Assessment: Yes

Students are able to request formal recognition of their prior learning or experience outside the classroom. Challenge examination, portfolio-assisted assessment, or work-based assessment are used 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.

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 Columba or elsewhere should go to the College of the Rockies Enrolment Services office.

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

- gain the ability to deploy and manage advanced network services for enhanced network performance;
- learn to implement load balancing for optimal resource utilization and high availability;
- acquire skills in configuring advanced file services to improve data management and efficiency;
- understand the management of Active Directory Certificate Services to enhance security;
- learn to utilize Active Directory Federation Services for secure identity federation;
- gain knowledge on implementing Active Directory Rights Management Services for data protection;
- learn to design and implement failover clustering for high availability; and
- develop strategies for maintaining business operations in the face of disruptions, ensuring organizational resilience.

Course Topics:

- Advanced File Services Management
- Active Directory Certificate Services (AD CS)
- Active Directory Federation Services (AD FS)
- Active Directory Rights Management Services (AD RMS)
- Dynamic Access Control
- Failover Clustering
- Disaster Recovery Planning
- Secure Data Communication with Server

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
Project	25%
Assignments/Labs	40%
Participation	5%

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 outline.