

CIST-201 – Windows Administration 2

Technology

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

Program Area: Information Technology

Description:

In this course students will build upon their foundational knowledge from Windows Administration 1, delving deeper into topics like DNS configuration and troubleshooting. Additionally, they will receive an introduction to Group Policy infrastructure, gaining insights into effectively supporting user accounts through Group Policy Objects (GPOs). Moreover, students will explore advanced concepts including FSRM, quota management, file screening, and optimization strategies for file services. Through practical exercises and hands-on labs, participants will develop a comprehensive understanding of these key areas, enhancing their ability to manage network resources effectively.

Furthermore, this course will equip students with essential knowledge about Network Access Protection (NAP) and Remote Access protocols. By engaging in practical scenarios, students will gain insights into the challenges inherent in a Server/Client environment, ranging from performance optimization and latency reduction to reliability enhancement, scalability considerations, and security vulnerabilities. The overarching goal is to provide students with a holistic understanding of server and network environments, empowering them to tackle real-world challenges with confidence and proficiency.

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						
Seminar/Tutorials						
Laboratory/Studio	40					
Practicum/Field Experience						
Co-op/Work Experience						
Other						
Total	60					

Course Requisites:

- Completed the following:
 - CIST109 Windows Administration 1 (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:

20741WV (55349): Networking with Windows Server Courseware by Waypoint Ventures, LLC.

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

- analyze requirements and design goals for client server and distributed system;
- analyze, debug, and identify bottlenecks in a client/server system;
- perform advanced DNS Configuration and Troubleshooting Techniques;
- perform advanced group policy configurations;
- explore File Server Resource Manager (FSRM) Features and Functionality;
- perform effective Quota Management Strategies for File Services;
- explain and manage Windows Deployment Services;
- manage the Windows Server Update Services (WSUS) Implementing File Screening and Content Filtering Policies; and
- navigate the challenges of a server/client environment, such as performance, delays, reliability, scalability, and security issues.

Course Topics:

- Client/Server architecture
- Implementing group policy infrastructure
- Configuring and troubleshooting DNS
- Introduction to remote access protocols and secure connectivity solutions
- Optimization strategies for file services performance
- File server resource manager
- Networking protocols
- Performance analysis and debugging

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%
Project	25%
Participation	5%
Final Exam	30%
Total	100%

Grade Scheme

	A +	Α	A-	B+	В	B-	C+	С	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