



Rowan College
at
BURLINGTON COUNTY

COMPUTER INFORMATION SYSTEMS

CODE: CIS 165

TITLE: Network and Systems Administration

DIVISION: STEM

COURSE DESCRIPTION: This course provides an advanced knowledge of networking as well as related equipment and terminologies. The course will cover local area network, wide area network, managing enterprise level networks using Active Directory, and remote access. Advanced network management and environment customization techniques will be explored through the hands-on lab component, which will include creating users/groups, managing file permissions, configuring server roles, using group policies to configure and secure the network, routine system maintenance and troubleshooting. It will provide students the necessary skills to pass the Microsoft MCSA Server 2012 70-410 certification exam.

PREREQUISITE: CIS 101 or CIS 138

COREQUISITE: CIS 150

CREDITS: 4 cr.

REQUIRED MATERIALS (CHECK BOOKSTORE FOR LATEST EDITION):

Click on the bookstore for the supplies which you are attending each class.

Rcbc.edu/bookstore

COURSE LEARNING OUTCOMES:

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

- Install, configure and manage enterprise systems/networks, including hardware/software.
- Implement and administer server operating and services, such as active directory DHCP, DNS, DFS, PowerShell, cloud computing, and HyperV.
- Install, configure, and troubleshoot various TCP/IP services, such as Telnet, FTP, SSH, remote administration, and other specialized services, individually and as a team.
- Introduction to Linux Operating Systems services, such as DHCP, Apache web, SSH, Telnet, and FTP.

GENERAL EDUCATION OUTCOMES IN THIS COURSE:

Written and Oral Communication: Communication	* Students will logically and persuasively support their points of view or findings.
Technological Competency or Information Literacy: Technology	* Students will demonstrate competency in office productivity tools appropriate to continuing their education. * Students will use critical thinking skills for computer-based access, analysis, and presentation of information. * Students will exhibit competency in library online database tools appropriate to accessing information in reference publications, periodicals and bibliographies. * Students will demonstrate the skills required to find, evaluate, and apply information to solve a problem.

CORE COURSE CONTENT:

- Network Hardware and Software
- Network Topologies and Technologies
- Network Protocols
- Virtualization
- Switching & Routing
- Basic Network Design
- Networking with Windows and Windows Domains
- Server Management & Administration
- WAN Essentials
- Network Support, troubleshooting, management & security

COURSE ACTIVITIES:

Course activities vary from course to course and instructor to instructor. Below is a listing of some of the activities students can anticipate in this course:

- ▶ Writing assignments: students will analyze current issues in the field using current articles from the popular press as well as library research including electronic resources databases.

- ▶ Speaking assignments: students will present research individually or in groups using current technology to support the presentation (e.g., PowerPoint presentation); students will participate in discussions and debates related to the topics in the lessons. Discussions may also focus on cross-cultural and legal-ethical dilemmas as they relate to the course content.
- ▶ Simulation activities: Trends and issues will analyzed for their ethical as well as social or legal significance. Students might role-play common situations for classmates to analyze. Current news articles may be used to generate discussion.
- ▶ Case Studies: Complex situations and scenarios will be analyzed in cooperative group settings or as homework assignments.
- ▶ Lectures: This format will include question and answer sessions to provide interactivity between students and instructor.
- ▶ Speakers: Representatives from various related fields may be invited to speak.
- ▶ Videos: Related topics will provide impetus for discussion.

EDUCATIONAL TECHNOLOGY:

Rowan College at Burlington County advocates a technology enhanced teaching and learning environment. Advanced technological tools may be used in any course section to facilitate instruction. Many of our sections are web-enhanced, which means that some of your work will be submitted or completed online. Web enhancements may include on-line materials, grade books, testing and quizzes and assignment submission. Many students enjoy the flexibility and convenience that these online enhancements have provided, however if you have concerns about the technology involved, please speak to your instructor immediately.

STUDENT EVALUATIONS:

The student will be evaluated on the degree to which student learning outcomes are achieved. A variety of methods may be used such as tests, quizzes, class participation, projects, homework assignments, presentations, etc.

See individual instructor's course handouts for grading system and criteria (point value for each assessment component in course, e.g. tests, papers, presentations, attendance etc.), number of papers and examinations required in the course, and testing policy including make ups and/or retests.

GRADING STANDARD:

- A Mastery of essential elements and related concepts, plus demonstrated excellence or originality.
- B+ Mastery of essential elements and related concepts, showing higher level understanding.

- B Mastery of essential elements and related concepts.
- C+ Above average knowledge of essential elements and related concepts.
- C Acceptable knowledge of essential elements and related concepts.
- D Minimal knowledge of related concepts.
- F Unsatisfactory progress. This grade may also be assigned in cases of academic misconduct, such as cheating or plagiarism, and/or excessive absences.

For other grades, see the current ROWAN COLLEGE AT BURLINGTON COUNTY catalog.

COLLEGE POLICIES:

The current college catalog and student handbook are important documents for understanding your rights and responsibilities as a student in the RCBC classroom. Please read your catalog and handbook as they supplement this syllabus, particularly for information regarding:

- ▶ Academic Integrity Code
- ▶ Student Conduct Code
- ▶ Student Grade Appeal Process

OFFICE OF STUDENT SUPPORT AND DISABILITIES SERVICES:

RCBC welcomes students with disabilities into the college's educational programs. Access to accommodations and support services for students with learning and other disabilities is facilitated by staff in the Office of Student Support (OSS). In order to receive accommodations, a student must contact the OSS, self-identify as having a disability, provide appropriate documentation, and participate in an intake appointment. If the documentation supports the request for reasonable accommodations, the OSS will provide the student with an Accommodation Plan to give to instructors. Contact the Office of Student Support at 609-894-9311, ext. 1208 or visit the website at: rbc.edu/studentsupport

ADDITIONAL SUPPORT/LABS:

RCBC provides academic advising, student support personal counseling, transfer advising, and special accommodations for individuals with disabilities free to all students through the Division of Student Services. For more information about any of these services, visit the Laurel Hall on the Mt. Laurel Campus, or call (609) 894-9311 or (856) 222-9311, then dial the desired extension:

- Ext. 1557 Academic Advisement and Counseling
- Ext. 1803 Special Populations
- Ext. 2737 Transfer Center

Or visit the following websites:

Academic Advising rbc.edu/advising
Student Support Counseling rbc.edu/counseling

Transfer Center

rcbc.edu/transfer

RCBC offers a free tutoring for all currently enrolled students. For more information regarding The Tutoring Center call Extension 1495 at (609) 894-9311 or (856) 222-9311 or visit the Tutoring Center Website at rcbc.edu/tutoring

Reviewed 02/2020, CAR