Common Course Outline
DCOM 220
Cisco IV: Accessing the WAN
4 Semester Hours

The Community College of Baltimore County

Description

DCOM 220 – 4 Credits – Cisco IV: Accessing the WAN introduces the Wide Area Network (WAN) technologies and network services required by converged applications in enterprise networks. The class is designed to help students prepare for professional careers in the information and communication technology (ICT) field and the Cisco Certified Network Associate (CCNA) certification exam.

Prerequisite: DCOM 219 or consent of the program coordinator

Overall Course Objectives

Upon completion of this course the student will be able to:

1. describe the impact of applications (e.g., Voice Over IP and Video Over IP) on a network;
2. configure, verify, and troubleshoot Dynamic Host Configuration Protocol (DHCP) and Domain Name System (DNS) operation on a router;
3. verify, monitor, and troubleshoot Access Control Lists (ACLs) in a network environment;
4. configure and verify a basic WAN serial connection, a Point-to-Point (PPP) connection between Cisco routers, and Frame Relay; and
5. troubleshoot WAN implementation issues.

Major Topics

I. Introduction to WANs
II. Point-to-Protocol (PPP)
III. Frame Relay
IV. Network Security
V. Access Control Lists (ACLs)
VI. Teleworker services
VII. IP addressing services
VIII. Network troubleshooting

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

Minimum of five laboratory projects
Minimum of three exams

Writing: The individual faculty member will determine specific writing assignments, such as an Acceptable Usage Policy.

Other Course Information

This course is a program requirement for the Network Technology Security and Cisco degree options, as well as the Network Technology Cisco certificate.
This course is the fourth course in a four-course sequence.
This course is taught in a computerized environment.

Date Revised: 04/29/09