Common Course Outline
DCOM 217
Cisco I: Introduction to Networks
4 Credits

Community College of Baltimore County

Description

DCOM 217 - Cisco I: Introduction to Networks introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of Internet Protocol (IP) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced. Students build simple Local Area Networks (LANs), perform basic configuration for routers and switches, and implement IP addressing schemes.

4 Credits

Co-requisite: DCOM 101 or consent of the program coordinator

Overall Course Objectives

Upon completion of this course the student will be able to:
1. explain network technologies;
2. explain how devices access local and remote network resources;
3. describe router hardware;
4. explain how switching operates in a small to medium-sized business network;
5. design an IP addressing scheme to provide network connectivity for a small to medium-sized business network;
6. configure initial settings on a network device;
7. implement basic network connectivity between devices; and
8. configure monitoring tools available for small to medium-sized business networks.

Major Topics
I. Exploring the Network
II. Configuring a Network Operating System
III. Network Protocols and Communications
IV. Network Access
V. Ethernet
VI. Network Layer
VII. Transport Layer
VIII. IP Addressing
IX. Subnetting IP Networks
X. Application Layer
XI. It’s a Network
**Course Requirements**

Grading procedures will be determined by the individual faculty member and will include the following:

**Grading/exams**
- A minimum of five laboratory projects
- A minimum of two exams

Written Assignments: Students are required to utilize appropriate academic resources.

**Other Course Information**
This course is a program requirement for the following programs:
Network Technology A.A.S Degree with Cisco Options
Cyber Security, A.A.S Degree
Network Technology for Cisco Certificate
Cyber Security Certificate

This course is the first course in a four-course sequence. This course is taught in a computerized environment.

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