Common Course Outline
DCOM 208
Designing Network Infrastructure
4 Semester Hours

The Community College of Baltimore County

Description

Designing Network Infrastructure
Presents the methodology to design Microsoft networking environments. Students will perform tasks performed by Network Engineers. This course, taught in a combination lecture and hands-on format, prepares students for one of the Microsoft MCP exams required for MCSA and/or MCSE certification.
Prerequisite: DCOM 202 or permission of Program Coordinator.

Overall Course Objectives

Upon completion of this course the student will be able to:
1. Outline network technology business requirements for an organization
2. Design a network infrastructure that meets business requirements
3. Evaluate a company's existing technical environment
4. Analyze existing disaster recovery strategy for client computers, servers, and the network
5. Design a DHCP strategy
6. Design a TCP/IP networking strategy
7. Identify factors that influence company strategies as it relates to the design of a network infrastructure
8. Analyze the network requirements for client computer access.
9. Design DNS deployment strategy
10. Design WINS deployment strategy
11. Analyze the structure of IT management include type of administration, such as centralized or decentralized; funding model
12. Contribute to IT management decision-making process
**Major Topics**

I. Introduction to Design  
II. Business Environment Requirements  
III. Technical Environment Analysis  
IV. Network Environment Design  
V. TCP/IP Implementation  
VI. TCP/IP Services  
VII. Wide Area Design  
VIII. Designing Resource Availability  
IX. Implementation and Management

**Course Requirements**

Grading: Grading procedures will be determined by the faculty member, will be provided the first week of class, and will include:

1. Participation in class learning activities  
2. Case Studies and projects  
3. Minimum of two exams  
4. Minimum of four quizzes  
5. Comprehensive final exam.

**Other Course Information**

The required text is *Windows 2000 Network Infrastructure Design, Special Edition*  
This is a core course for the MCSE degree concentration and preparation certification  
This course is taught in a computerized environment.