

Common Course Outline
DCOM 221
Analysis and Design of Data Communications Systems
3 Semester Hours

The Community College of Baltimore County

Description

Analysis and Design of Data Communications Systems

Integrates systems analysis and design with systems analysis and design of data communications; covers general systems theory, structured analysis and design, data communications, network analysis and design, and network software design.

Prerequisite: DCOM 101

Overall Course Objectives

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

1. Describe the basic systems components
2. Describe modern system life cycles
3. Indicate involvement of data communication specialists in modern life cycle
4. Analyze current system using structured methodology
5. Design a new system that would include a data communications system
6. Determine if a network meets user requirements
7. Describe implementation techniques
8. Determine if network is expandable
9. Determine if network is maintainable
10. Describe techniques for managing a network

Major Topics

- I. General Systems Theory
- II. Systems Life Cycles
- III. Structured Methodologies
- IV. Network Analysis
- V. Scalability of Networks
- VI. Managing Networks

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 *Applied Data Communications*
by Goldman