

**MAYLAND COMMUNITY COLLEGE
Fall Semester 2005 Welcomes You To:**

**NET110/10
Data Communications/Networking
Contact hrs = 4 Credit hrs = 3**

Course Description

This course introduces data communication and networking. Topics include telecommunication standards, protocols, equipment, network topologies, communication software, LAN's, WAN's, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking.

Prerequisites: None

Corequisites: None

Instructor Information

Instructor: Ed Young
Office Location: P216
Telephone Number: 765 7351 ext. 332
E-mail Address: reyoung@cc.mayland.edu
Office Hours: Monday 11:00 - 12:00 noon, Tuesday 10:00 – 11:30 am, Wednesday 11:00 - 12:00 noon, Thursday 10:00 – 11:30 am and 5:00 – 6:00 pm

Course Information

Meeting Time: 8:00 am to 9:50 am TTh Room P204

Required Text(s): **Managing and Troubleshooting Networks**, by Meyers, McGraw Hill

Required supplies: None

Course Objectives/Competencies:

1. Be able to identify common network protocols
2. Identify appropriate uses for the protocols
3. Identify different network topologies and discuss the advantages and disadvantages of each topology
4. Identify and discuss features and uses of the major network operating systems
5. Identify and discuss the features and uses of various network hardware components
6. Identify the layers of the OSI model and know what each layer does
7. Discuss technological trends related to data communication and network implementation
8. Understand the pros/cons of network cabling using UTP and fiber optic cable
9. Be able to define WAN protocols such as ISDN, frame relay, DSL
10. Be able to work with IP addressing
11. Understand basic network security risks

Attendance Policy/Tardiness/Make-Up Work:

You are expected to attend class. If you do not attend class on a regular basis you may be administratively dropped (see item below). If you need to withdraw, be sure you do so officially by filling out a drop form. If you just stop coming to class without withdrawing, your final grade will be an F

Grading Criteria/Tests/Projects:

Your grade average will be determined by exercises, three quizzes, and a final exam. If you miss a scheduled quiz, be ready to take a makeup upon your first return to class. Unless prior arrangements are made, makeup quizzes are short answer instead of multiple choice. A final average will be computed and the grading scale below will be used. If your final average falls between two grades such as 92.3, this is a borderline grade. Your attendance will determine whether your grade remains a B in this case or is rounded up to an A. If you miss 3 classes or less then the grade is rounded up. If you miss over 3 classes for any reason, the grade remains as it is. Exercises will be given a score and a due date. You will not receive the maximum score if your work is turned in after the due date. Exercises more than 3 class meetings overdue will not be accepted. *All exercises must be completed and turned in by the last day of this class for fall semester. No exercises will be accepted after this.*

Grading Scale:

A = 93-100	Quiz #1	20%
B = 85-92	Quiz #2	20%
C = 77-84	Quiz #3	20%
D = 70-76	Exercises	20%
F = below 70	Final exam	20%

Inclement Weather Procedures:

Check local radio/TV for class cancellation due to weather. On snow delay days this class will start at 10:00 am and end at 11:20 pm

Academic Standards/Student Expectations/Ethics:

You are expected to do your own work. Turning in some else’s work as your own or cheating on a quiz can result in your being dropped from the class.

Withdrawal Dates:

Fall 2005

End of Unconditional Withdrawal	Friday, September 23
End of Conditional Withdrawal	Tuesday, November 1

Administrative Withdrawal statement: If a student has not been in contact with the instructor and has not attended class for a consecutive two-week period, an administrative withdrawal will be submitted by the instructor. If you are administratively withdrawn you cannot re-enter the class.

Special Accommodations: Any student requesting special accommodations for this course due to a disability should apply for services through the SOAR Office or the Counseling Center, which will document the disability. A counselor will then help determine which accommodations, if any, the student needs for success in this course.

Course Outline/Topics NET110/10 Fall 2005 TTh

Tuesday	Thursday
	Aug 18 Intro to the course, Chapter 1 Introduction Chapter 2 Defining Networking
Aug 23 Chapter 2 Defining Networking Chapter 3 Building a Network with OSI	Aug 25 Chapter 3 Building a Network with OSI
Aug 30 Chapter 4 Hardware Concepts	Sept 1 Chapter 4 Hardware Concepts Chapter 5 Ethernet Basics
Sept 6 Chapter 5 Ethernet Basics	Sept 8 Chapter 6 Modern Ethernet
Sept 13 Chapter 6 Modern Ethernet	Sept 15 Quiz #1
Sept 20 Chapter 7 Non-Ethernet Networks	Sept 22 Chapter 8 Installing a Physical Network
Sept 27 Chapter 8 Installing a Physical Network	Sept 29 Chapter 9 Wireless Networks Chapter 10 Protocols
Oct 4 Chapter 11 TCP/IP	Oct 6 Chapter 11 TCP/IP
Oct 11 No Class Fall Break	Oct 13 Chapter 12 Network Operating Systems
Oct 18 Quiz #2	Oct 20 Chapter 13 Sharing Resources
Oct 25 Chapter 13 Sharing Resources Chapter 14 Going Large With TCP/IP	Oct 27 Chapter 15 TCP/IP and the Internet
Nov 1 Chapter 16 Remote Connectivity	Nov 3 Chapter 16 Remote Connectivity
Nov 8 Chapter 17 Protecting Your Network	Nov 9 Chapter 17 Protecting Your Network
Nov 15 Chapter 18 Interconnecting Network Operating Systems	Nov 17 Chapter 18 Interconnecting Network Operating Systems
Nov 22 Quiz #3	Nov 24 No Class Thanksgiving
Nov 29 Chapter 19 The Perfect Server	Dec 1 Chapter 19 The Perfect Server
Dec 6 Chapter 20 Zen and the Art of Network Support	Dec 8 Review
Dec 13 Final Exam	