

WEST VIRGINIA UNIVERSITY AT PARKERSBURG
UNIFORM COURSE SYLLABUS

Name of Course: Network Management, Maintenance & Administration

Course Number: CIT 102

Hours: 4

Department: Computer & Information Technology

Division: Technology

Prerequisites: CS 105, coreq CIT 101

I. Course Description

This is an introductory course on networking technologies. Subjects covered are local area networks, wide area networks, the OSI Model, protocols, topologies, transmission media and security. Included in this course are all the elements required for the Network+ certification.

II Course Objectives

By the end of the course the student will have a working knowledge of:

- Operating Network Management Systems
- Setting up Standard Operating Procedures
- Administering Change Control System
- Planning a Customer's Job
- Maintaining the Network
- Implementing Change Control System
- Implementing the Installation of a Network
- Managing Support Efforts
- Troubleshooting the Network
- Designing the Network
- Analyzing/Evaluating the Accountability of New Technology
- Developing Documentation and SOPs
- Have a strategy for managing change in a fast-moving world.
- Be aware of the social and ethical issues related to the information society, such as privacy, licensing, copyright and job placement.

III. Topics to Be Studied

- Background, History & Evolution of Networking.
- OSI Model
- Network Protocols
- Networking Media
- Network Architecture
- Network Hardware
- WANs and Remote Connectivity
- Network OS
 - NT, NetWare, Unix

- Network Troubleshooting
- Network Administration
- Network Design & Configuration
- Network Security

IV. Special Projects to Be Included in Course

Project 1 - Individual students will be required to successfully design, assemble and configure a computer network, including the server operating system.

Project 2 – Individual students will be required to troubleshoot a malfunctioning computer network and repair it.

V. Methods of Student Evaluation

- Tests
- Lab Activities
- Application Projects

VI. Assessment of Outcomes

The course itself serves as an assessment of the Network+ Certification requirements. Successful course completion as well as achieving the Network+ certification demonstrates that students have mastered the criteria.

VII. Other Information

This course is designed to prepare the student for a career in the computer industry. Along with the above stated course objectives this course will prepare the student to take their actual Network+ Certification exam at an authorized Sylvan Testing Center.

February 3, 2002