ITIS 108: NETWORK OPERATING SYSTEMS

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2023
Credits:	4
Total Contact Hours:	108
Lecture Hours :	54
Lab Hours:	54
Hours Arranged:	0
Outside of Class Hours:	108
Strongly Recommended:	ITIS 107.
Transferable to CSU:	No
Transferable to UC:	No
Grading Method:	Standard Letter, Pass/No Pass

Catalog Course Description

This course provides information covering the areas of network operating systems used on local and wide area networks (LANS and WANS), as well as popular server software. 54 lecture hours, 54 lab hours.

Course Objectives

- identify the components of a network server
- Summarize the purpose of external storage technologies
- Write, utilize and maintain documentation, diagrams and procedures
- Implement and configure different methods of server access
- Given a scenario, carry out basic steps of a disaster recovery plan
- identify the major operating systems in the networking industry
- install and configure a network file server
- install and configure a client workstation
- effectively manage network security
- troubleshoot most common network problems
- Install, deploy configure and update NOS (Network Operating Systems)
- Given a scenario, implement and administer NOS management features based on procedures and guidelines
- Summarize server virtualization concepts, features and considerations

Major Course Content

1. Basic Server Configuration and Requirements
   a. Processor
   b. Memory
   c. Storage media
   d. Network Interface Card (NIC)
2. Operating Systems
   a. Novell
   b. Microsoft
   c. Banyon/Vines
   d. Others
3. Installing and Configuring Network Operating Systems
   a. Novell
   b. Microsoft
4. Client Software Used for Networking
   a. Protocols
   b. Installation
   c. Advantages/disadvantages
5. Security
   a. LAN and WAN security issues
   b. C2 security
   c. Do's and Dont's of security
   d. Internet security
6. Troubleshooting Network Problems
   a. Server problems
   b. Client problems
   c. Cable problems
   d. Incompatibilities

Lab Content

In this course students will be performing labs on the following subjects.

1. Server development
   a. DNS Services
   b. DHCP Services
   c. Web Services
   d. Domain Controllers
2. Disaster Recovery
   a. Backups
   b. Clustering
3. Storage Services
   a. Internal and External SCSI & SATA Drives
4. Network Operating Systems
   a. Microsoft OS
   b. Linux OS

Suggested Reading Other Than Required Textbook

Required reading will be industry journals.

Examples of Required Writing Assignments

Student will be required to complete a writing assignment on an assigned subject, generally comparing two current operating systems.

Examples of Outside Assignments

Students will be required to complete homework in form of multiple choice, short answer questions in preparation for Industry exams.

Instruction Type(s)

Lab, Lecture, Online Education Lab, Online Education Lecture