

## **CIT 214—Advanced Netware System Administration (3)**

### Course Description

This course is designed to provide students with the knowledge and skills to design, configure, and administer a complex network. The course is designed to provide advanced skills and abilities to handle more challenging network situations than were presented in the basic administration course. Lecture: 2 hours, lab: 2 hours.

Prerequisites: CIT 213; or consent of instructor.

### Course Competencies

Upon successful completion of this course, the student can:

1. Design, create and secure Directory Trees
2. Use the NDS Manager to partition and Replicate the NDS database
3. Plan and manage time synchronization
4. Understand and troubleshoot Novell Directory Services
5. Develop and implement strategies for network and server optimization
6. Understand configuration issues related to internetworking

### Course Outline

- I. Server startup procedures and configuration files
  - A. Server components overview
  - B. Server configuration files
  - C. Customizing the server configuration files
  - D. Creating server batch files
- II. Designing and the Directory Tree
  - A. Benefits of an effective directory tree design
  - B. Identifying components of directory design
  - C. Creating the directory tree structure
  - D. Reviewing directory tree design phases
- III. Securing the Directory Tree
  - A. NDS default rights
  - B. Guidelines for implementing NDS security
  - C. Centralized versus distributed administration
  - D. Suggested administrative roles and rights assignments
- IV. Managing Partitions and Replicas
  - A. Partition and replica concepts
  - B. Introduction to NDS Manager
  - C. Partitioning and replicating the NDS database
  - D. Planning partitions and replicas
  - E. Rights for creating partitions and adding replicas
- V. Implementing and Managing Time Synchronization
  - A. Time synchronization
  - B. Time synchronization communication
  - C. Planning time synchronization
  - D. Managing time synchronization
- VI. Completing your NDS Design

- A. Completing the NDS design
- B. NDS security
- C. Partitions and replicas
- D. Time Synchronization
- VII. Maintaining Novell Directory Services
  - A. Understanding replication and synchronization
  - B. Preventative maintenance
  - C. Troubleshooting NDS inconsistencies
  - D. Identifying NDS database inconsistencies
  - E. Finding help resolving inconsistencies
  - F. Repairing NDS
  - G. Recovering from a crashed SYS: volume
- VIII. Integrating and Managing Previous Versions of NetWare
  - A. Bindery services
  - B. Managing NetWare 3 from NetWare administrator
- IX. Optimizing the Network and Server
  - A. NetWare memory management
  - B. Memory allocation
  - C. Memory reallocation and garbage collection
  - D. MONITOR statistics
  - E. Cache utilization
  - F. Memory utilization
  - G. Server packets and buffers
  - H. Network board statistics
  - I. Disks drivers and controllers
  - J. Optimizing disk space
  - K. Block suballocations
  - L. File compression
  - M. Packet Burst Protocol
  - N. Large internal packets (LIPS)
  - O. LIPS and Packet Burst Protocol
- X. Configuring NetWare for diverse clients
  - A. Configuring the server for diverse clients
  - B. NetWare client for Macintosh
  - C. NetWare client for OS/2
  - D. NetWare IP
  - E. NetWare internetworking
  - F. Internationalization