

MERCER COUNTY COMMUNITY COLLEGE

Division of Business and Technology

NET126

Network Directory Services Administration

COURSE DESCRIPTION:

Students plan, configure, and administer a directory services infrastructure, including configuring Domain Name System (DNS) to manage name resolution, schema, and replication, administering the user environment and software with group policy, deploying the Windows operating system remotely using Remote Installation Services (RIS), and using directory services to centrally manage users, groups, shared folders, and network resources. In addition, implementing and troubleshooting security in a directory services infrastructure is covered, as well as monitoring and optimizing directory services performance. Hands-on exercises reinforce certification exam objectives.

Text(s): Reference Division Booklist

Prerequisites: NET 122

Credits: 3

Lecture Hours: 2

Studio/Lab Hours: 2

Food and drink are strictly prohibited in classrooms, as per health and safety laws. Students may not bring in chemicals or cleaning fluids without the appropriate MSD sheets.

Course Coordinator: Jeff Weichert

Latest Review: Spring 2004

I. OVERVIEW OF THE COURSE

Students plan, configure, and administer a directory services infrastructure, including configuring Domain Name System (DNS) to manage name resolution, schema, and replication, administering the user environment and software with group policy, deploying the Windows operating system remotely using Remote Installation Services (RIS), and using directory services to centrally manage users, groups, shared folders, and network resources. In addition, implementing and troubleshooting security in a directory services infrastructure is covered, as well as monitoring and optimizing directory services performance.

The course is intended for those who administer Microsoft Windows NT Networks or who are on the Microsoft Certified Systems Engineer Windows NT track.

This three-credit course uses a combination of lectures, demonstrations, discussions, online assignments, and hands-on labs.

II. PREREQUISITES

The following skills are required to complete the course successfully:

- Knowledge of the fundamentals of current networking technology is required.
- Successful completion of the MCSE Training Kit - Microsoft Windows 2000 Server is recommended.

III. OUTLINE

- Introduction to Active Directory, including overview, and general concepts.
- Active Directory administration tasks and tools, including Microsoft Management Console (MMC) and Task Scheduler
- Implementing Active Directory, including planning, installing, understanding Operations Master Roles, and Organizational Unit structure.
- Integration with Domain Name Service (DNS), including understanding DNS Name resolution, understanding and configuring Zones, Zone replication and transfer, and general monitoring and troubleshooting.
- Configuration of Sites, including configuring Site settings, Inter-Site replication, replication troubleshooting, and managing and maintaining server settings.
- User Account administration, including planning and creating, creating User Profiles and Home Directories, and general maintenance.
- Group Account administration, including planning and creating, understanding Default Groups, and special Administrator Groups.
- Securing network resources, including understanding and implementing NTFS permissions, special permissions, copying and moving files and folders, and troubleshooting permission problems.

III. OUTLINE (cont'd)

- Administering shared folders, including planning and sharing, combining share permissions with NTFS permissions, and configuring DFS to gain access to network resources.
- Administration of Active Directory, including locating objects, controlling access to objects, publishing resources, moving objects, backing up and restoring the directory, and delegating administrative control of objects, and troubleshooting.
- Administer Group Policy, including concepts, planning and implementation, managing software group policy, and troubleshooting.
- Administering security, including auditing, security logs, user rights, security templates, security analysis, and troubleshooting.

IV. COURSE SUMMARY

At the completing of this course, with appropriate study, you will be able to:

- Use Active Directory Administrative Tools
- Implement Active Directory
- Integrate DNS and Active Directory
- Configure Site and Intersite Replication
- Administrative User Accounts
- Administrative Group Accounts
- Secure Network Resources
- Administer Shared Folders
- Administer Active Directory
- Administer Group Policy
- Implement Active Directory Security Solutions
- Manage Active Directory Performance

V. EVALUATION

Final grades are determined by a weighted average of midterm and final examinations, quizzes, laboratory assignments, homework assignments, class participation, and attendance. Your final grade in the course will be based on the following:

Class attendance and participation	10%
Homework assignments	15%
Laboratory assignments	15%
Quizzes	20%
Midterm examination	20%
Final examination	<u>20%</u>
	100%

Classroom Conduct Statement

It is the student's responsibility to attend all classes. If a student misses a class meeting for any reason, he/she is responsible for all content that is covered, for announcements made, and for acquiring any materials that may have been distributed in class. It is expected that students be on time for all classes. Students who walk into class after it has begun are expected to choose seats close to where they entered the room so that they do not disrupt the class meeting.

Students are expected to follow ordinary rules of courtesy during the class sessions. Engaging in private, side conversations during class time is distracting to other students and to the instructor. Leaving class early without having informed the instructor prior to class is not appropriate. Unless there is an emergency, leaving class and returning while the class is in session is not acceptable behavior. Disruptive behavior of any type, including sharpening pencils during class while someone is speaking, is not appropriate.

The college welcomes all students into an environment that creates a sense of community of pride and respect; we are here to work cooperatively and to learn together.

Academic Integrity Statement

A student who knowingly represents work of others as his/her own, uses or obtains unauthorized assistance in the execution of any academic work, or gives fraudulent assistance to another student is guilty of cheating. The penalty for violating the honor code is severe. (*See Student Handbook.*) Any student violating the honor code is subject to receive a failing grade for the course and will be reported to the Office of Student Affairs. If a student is unclear about whether a particular situation may constitute an honor code violation, the student should meet with the instructor to discuss the situation.

It is permissible to assist classmates in general discussions of computing techniques; general advice and interaction are encouraged. Each person, however, must develop his or her own solutions to the assigned homework and laboratory exercises. Students may not "work together" on graded assignments. Such collaboration constitutes cheating, unless it is a group assignment. A student may not use or copy (by any means) another's work (or portions of it) and represent it as his/her own.