

MERCER COUNTY COMMUNITY COLLEGE

Division of Business and Technology

NET 242

Directory Services Infrastructure Design

COURSE DESCRIPTION

Students learn to analyze a company's business requirements related to the design of a directory services infrastructure, including the identification of current and future networking needs, from connectivity and access, through security, performance, and end user support. Topics include assessment of the impact of directory services on existing systems and processes, as well as potential upgrades, creating a forest model and schema modification plan, and defining and naming domains. Hands-on exercises reinforce certification exam objectives.

Text (s): **Reference Division Booklist**

Prerequisites: **NET124, NET126**

Co-requisites:

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. COURSE OBJECTIVES

At the completion of this course, with appropriate study, you will be able to do the following:

- A. Analyze a company’s business requirements, including structure, work processes, and growth strategy.
- B. Identify current and future networking needs, from connectivity and access to security, performance, and end user support.
- C. Assess the impact of Directory Services on existing systems and processes, as well as on potential upgrades.
- D. Create a forest model and schema modification plan.
- E. Define and name domains.
- F. Design site topology, including placement of domain controllers and DNS servers.
- G. Develop the structure of organizational units and plan for Group Policy.

II. PREREQUISITES

- A. Students should have taken the courses, and/or passed the associated exams, in the following four core areas:
 - 1. Installing, configuring, and administering the Windows desktop operating system.
 - 2. Installing, configuring, and administering the Windows server operating system.
 - 3. Implementing and administering a network infrastructure.
 - 4. Implementing and administering a directory services infrastructure.

III. EVALUATION

Final grades are determined through 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:

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

IV. TOPIC OUTLINE

- A. Introduction to directory services, including Active Directory overview, and understanding Active Directory concepts.
- B. Introduction to designing a directory services infrastructure, including design overview, analyzing the current business environment, and analyzing the current technical environment.
- C. Creating a forest plan, including designing a forest model, and designing a schema modification plan.
- D. Creating a domain plan, including defining domains, defining a forest root domain, defining a domain hierarchy, naming domains, and planning DNS server deployment.
- E. Creating an organizational unit plan, including defining OU structures, and planning user accounts and groups.
- F. Creating a site topology plan, including defining sites, placing domain controllers in sites, defining a replication strategy, and placing global catalog servers and operations masters.
- G. Creating a directory services implementation plan, including planning a migration from NT 4 Directory Services to Windows 2000 Active Directory, and planning directory service synchronization with Active Directory.