

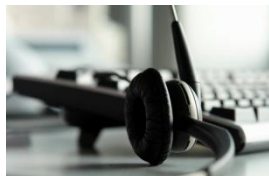
Information Technology and Administrative Management Department
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ITAM

Information Technology &
Administrative Management

Central Washington University

**IT 464 (Formally IT 455)
Directory Services
Course Syllabus - 4 credits**



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Course Description: This course teaches students through lectures, discussions, demonstrations, textbook exercises, and classroom labs. Students work with Microsoft Windows Server 2003 Active Directory directory services (an LDAP-compliant directory service) in planning, implementing, and maintaining forests, sites, domains, and organizational units (OUs) that meet the accessibility, performance, and security goals of a business plan. In addition, students use Group Policy to deploy software and configure a computer or user environment. Finally, students learn troubleshooting techniques that are valuable for the maintenance of a network environment.

Course Objective: This course assists students in understanding the planning, implementation and maintenance issues associated with Lightweight Directory Access Protocol (LDAP) directory services in an enterprise environment.

Course Topics (not necessarily in this order):

Messaging services and directory services integration issues

Planning messaging services infrastructure

Configuring messaging services infrastructure

Installing, configuring and maintaining messaging services clusters

Managing recipient objects and address lists

Creating, configuring and administering public folders

Configuring and maintaining virtual servers for messaging services

SMTP protocol configuration and management

Configure security components for messaging services

Implement, configure and manage fault tolerance components for messaging services

Monitor and troubleshoot messaging services components

Specific Learner Outcomes:

This course will address the following goals and concepts:

Learner Outcomes	Assessment
Describe the components of Active Directory, including forests, sites, domains, domain trees, and organizational units (OUs).	Graded laboratory exercises and exams.
Understand the role of the Domain Name System (DNS) in an Active Directory environment.	Graded laboratory exercises and exams.

Understand and assess the domain and forest functional levels according to the needs of an organization's network environment.	Graded laboratory exercises and exams.
Understand the trust models used by Active Directory and their role in resource accessibility.	Graded laboratory exercises and exams.
Determine a site strategy based on the physical network infrastructure.	Graded laboratory exercises and exams.
Use Active Directory Sites And Services (MMC snap-in) to configure replication.	Graded laboratory exercises and exams.
Optimize and monitor replication.	Graded laboratory exercises and exams.
Plan the placement of global catalog servers.	Graded laboratory exercises and exams.
Understand and enable universal group membership caching.	Graded laboratory exercises and exams.
Understand and plan FSMO role placement.	Graded laboratory exercises and exams.
Troubleshoot FSMO role issues.	Graded laboratory exercises and exams.
Understand, plan, and implement local, global, domain local, and universal groups.	Graded laboratory exercises and exams.
Understand, plan, and implement group nesting.	Graded laboratory exercises and exams.
Use appropriate scripting tools to modify, create, and delete multiple users and groups.	Graded laboratory exercises and exams.
Understand, plan, and implement smart cards.	Graded laboratory exercises and exams.
Use the Run As program to perform administrative tasks.	Graded laboratory exercises and exams.
Plan and implement an organizational unit strategy based on administrative and business goals.	Graded laboratory exercises and exams.
Understand and implement Group Policy planning guidelines.	Graded laboratory exercises and exams.
Describe local and non-local group policies.	Graded laboratory exercises and exams.
Describe the Default Domain Policy and the Default Domain Controllers Policy.	Graded laboratory exercises and exams.
Use various tools to view and modify group policy settings.	Graded laboratory exercises and exams.
Explain group policy processing during computer startup and user logon.	Graded laboratory exercises and exams.
Describe the techniques that can be used to alter the inheritance of group policies.	Graded laboratory exercises and exams.
Analyze a set of policies and determine effective policies.	Graded laboratory exercises and exams.
Understand and apply security settings to users and computers.	Graded laboratory exercises and exams.
Use Group Policy to create a request for a computer or user certificate.	Graded laboratory exercises and exams.
Understand and implement folder redirection and offline files.	Graded laboratory exercises and exams.

Understand and implement disk quotas using Group Policy.	Graded laboratory exercises and exams.
Understand the policy refresh process and use Gpupdate to force the refresh of a policy.	Graded laboratory exercises and exams.
Use Group Policy to install, manage, and maintain software applications.	Graded laboratory exercises and exams.
Define and configure Software Restriction Policies.	Graded laboratory exercises and exams.
Filter the scope of a GPO.	Graded laboratory exercises and exams.
Use the Group Policy Management Console (GPMC) to manage GPOs.	Graded laboratory exercises and exams.
Use RSoP, GPRresult, and Group Policy Management Console to manage group policies.	Graded laboratory exercises and exams.
Delegate control of a GPO.	Graded laboratory exercises and exams.
Define and implement procedures used for Active Directory backup and restore.	Graded laboratory exercises and exams.
Understand and explain the primary, normal, and authoritative restore processes.	Graded laboratory exercises and exams.
Explain the defragmentation process and understand the differences between an offline and an online defragmentation.	Graded laboratory exercises and exams.
Implement guidelines and procedures for monitoring Active Directory.	Graded laboratory exercises and exams.
Use System Monitor and Event Viewer to monitor Active Directory and File Replication services.	Graded laboratory exercises and exams.
Differentiate and choose the appropriate tools for diagnosing Active Directory problems.	Graded laboratory exercises and exams.
Define the upgrade and migration paths available.	Graded laboratory exercises and exams.
Explain the difference between an interforest and intraforest migration.	Graded laboratory exercises and exams.
Understand the required steps to upgrade or migrate from Windows NT 4.0 to Windows Server 2003.	Graded laboratory exercises and exams.
Associate migration tools that are available with the tasks they can be used to perform.	Graded laboratory exercises and exams.
Explain the process and recommended order for upgrading Windows NT 4.0 domains.	Graded laboratory exercises and exams.
Explain the necessary security privileges for migrating between two forests.	Graded laboratory exercises and exams.
Explain the necessary requirements for migrating sidHistory information to the target domain.	Graded laboratory exercises and exams.

Textbook and other required materials: Microsoft Official Academic Course 70-294, *Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure* course book and lab manual, Corbin, W. Or most recent edition – contact the instructor.

Instructional Methods and Activities: This course employs instructor lecture, various assignments, laboratory assignments, instructor feedback, the use of Blackboard online course application.