

Networking Systems Administration Department
Business/Public Service Division
GREENVILLE TECHNICAL COLLEGE

COURSE SYLLABUS

Course Number: IST 258

Course Title: LAN Directory Services

Lecture hours per week: 3.0 **Semester credit hours:** 3.0

Prerequisite: IST 257

Catalog course description: A study of LAN objects, object properties, and how to organize network objects into a structure that is extensible and scalable, provides a hierarchical view of network resources and allows administrators, developers and end users to gain access to those resources. *Note: Microsoft Windows Server 2008 will be used in this course.*

Purpose of the course: Provide students with the knowledge and skills necessary to understand, install, configure, and administer directory services with a Windows 2008 Server network operating system.

Required text(s) or other materials:

1. MCTS Guide to Microsoft Windows Server 2008 Active Directory Configuration; Greg Tomosho: Course Technology/Thomson Learning; ISBN 13:978-1-423-90235-5; ISBN 10:1-423-90235-1
2. **NOTE:** Students in traditional classes must access Blackboard for course-related information. Students in hybrid and online classes will access their online content through Blackboard.

COLLEGE-WIDE STUDENT LEARNING OUTCOMES

1. Communication – Students will demonstrate the ability to use active reading and listening skills and to produce effective written and oral communication for varying audiences.
2. Information Technology and Technological Literacy – Students will demonstrate competency in using computer technology within a field of study.
3. Critical Thinking/Reasoning – Students will demonstrate the ability to apply the scientific method, mathematical processes, and research skills to analyze and solve problems/issues by using reflection and reasoning to justify conclusions.
4. Professional and Personal Responsibility – Students will demonstrate the ability to exhibit conduct, attitudes, and etiquette appropriate to the student's community and chosen career. Students will demonstrate the ability to manage time, to use effective interpersonal skills, and to display responsible behavior.
5. Diversity – Students will demonstrate the ability to recognize diversity and to demonstrate respectful conduct and attitudes toward all. Students will demonstrate the ability to explain how global issues impact life, work, and opportunities.

Approved March 26, 2009

NETWORKING SYSTEMS ADMINISTRATION PROGRAM LEVEL STUDENT LEARNING OUTCOMES

Upon successful completion of the Network Systems Administration program, the student will be able to:

1. Set up, maintain, and troubleshoot computer and network hardware.
2. Install, maintain, and troubleshoot operating system and application software.
3. Construct and configure local area networks.
4. Administer and troubleshoot network operating systems.
5. Analyze and implement security measures for information technology.

IST 258 COURSE OUTCOMES

Upon completion of the course, the student will be able to successfully complete 70% of the following tasks:

1. Identify Windows Server 2008 Editions, manage server roles, implement directory services and troubleshoot performance issues.
2. Implement and administer forests, trees, group policy, user accounts, groups, printers, shared folders and file permissions.
3. Configure TCP/IP and implement both the logical and physical infrastructure of Active Directory.
4. Install the Windows Server 2008 operating system and configure domain controllers, DNS servers, subnet objects, site links and intersite replication.

The objectives of the IST 258 course are intended to meet the Network Systems Administration program level student learning outcomes numbered 1, 2, 3, and 4.

IST 258 – Main Topics

Please refer the Syllabus Attachment 1 to review the actual Course Schedule. The schedule outlines the chapters that will be reviewed, when tests will be given and when assignment and labs will be due. The following are the main topics covered in this course.

Introductions

Chapter 1 – Introduction to Windows Server 2008

1. The Role of a Server Operating System
2. Windows Server 2008 Editions
3. Windows Server 2008 Roles

Chapter 2 – Installing Windows Server 2008

1. Planning a Windows Server 2008 Installation
2. Windows Server Core: Windows That Doesn't Do Windows
3. Virtualize Your Server With Hyper-V

Chapter 3 – Introducing Active Directory

1. The Role of a Directory Service
2. Installing Active Directory
3. What's Inside Active Directory
4. Introducing Group Policies

Test #1 – Chapters 1, 2, and 3

Chapter 4 – Active Directory Design and Security Concepts

1. Working With Organizational Units
2. Working With Forest, Trees, and Domains
3. Understanding Sites

Chapter 5 – Account Management

1. Managing User Accounts
2. Working With User Profiles
3. Managing Group Accounts

Chapter 6 – Windows File and Print Services

1. Windows File Systems
2. Securing Access to Files with Permissions
3. Windows File Sharing

Chapter 7 – Configuring Group Policy

1. Group Policy Architecture
2. Group Policy Settings
3. Group Policy Management and Monitoring

Test #2 – Chapters 4, 5, 6 and 7

Chapter 8 – Introduction to Windows Networking

1. Understanding the Windows Networking Paradigm
2. TCP/IP Operation and Configuration
3. Internet Protocol Version 6

Chapter 9 – Configuring DNS for Active Directory

1. Introduction to Domain Name System
2. Using DNS in Windows Server 2008
3. Configuring DNS Zones

Chapter 10 – Configuring and Maintaining the Active Directory Infrastructure

1. Examining Active Directory Functional Levels
2. Adding and Removing Domains
3. Configuring Active Directory Trusts
4. Configuring Intrasite Replication

Chapter 11 – Active Directory Certificate Services

1. Introducing Active Directory Certificate Services
2. Public Key Infrastructure Overview
3. AD CS Terminology

Test #3 – Chapters 8, 9, 10 and 11

Chapter 12 – Additional Active Directory Server Roles

1. Active Directory Lightweight Directory Services
2. Active Directory Federation Services
3. Read Only Domain Controllers

Chapter 13 – Server Management and Monitoring

1. Active Directory Maintenance
2. Active Directory Monitoring
3. Managing Server Core

Prepare for Final Exam

Final Exam – Chapters 1-13 and Cumulative Hands-On Portion

IST 258 – Course Specific Requirements

There are no specific course requirements other than attachment 1.

IST 258 – EVALUATION AND GRADING INFORMATION

GRADING POLICY

Major Tests	60 percent
Attendance, Homework, and Labs	15 percent
Final Exam	25 percent

NOTE: ALL GRADED TESTS AND EXAMS ARE RETAINED BY THE INSTRUCTOR.

Final letter grades will be issued as follows:

A	=	90 - 100
B	=	80 - 89
C	=	70 - 79
D	=	60 - 69
F	=	0 - 59

READ THIS SYLLABUS CAREFULLY

You should read this syllabus carefully and ask your instructor about *any* aspects that you do not understand. The syllabus is an agreement between you and your instructor concerning course objectives, course content, grading, and other policies and procedures particular to this course. The above information is specific to the course. Three additional documents are provided as attachments and *are considered a part of this syllabus*:

Attachment 1:

Each instructor will provide a supplement to this syllabus. The supplement will include: a week-by-week plan of instruction based on the section in which you are enrolled; your instructor's name, office hours and/or office location; and your instructor's contact information and recommended best methods to contact your instructor.

Attachment 2:

The Department responsible for developing and teaching has policies and procedures in place to assure quality instruction for all students. These are attached as "Departmental Policies and Procedures."

Attachment 3:

Please note that it is your responsibility to read the current Student Handbook included in Greenville Technical College's Catalog. (See website.) The Student Handbook addresses specific academic and student conduct policies and procedures. Excerpts from the Student Handbook representing the policies and procedures most often referred to in working with students are provided for your convenience as "Attachment 3."

Approved by:



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Date

This syllabus will remain in effect until revised or reviewed no later than August 2012.