

**Computer Technology Department**  
**Business and Technology Division**  
**GREENVILLE TECHNICAL COLLEGE**

**COURSE SYLLABUS**

**Course Title:** LAN Directory Services

**Course Number:** IST 258

**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 following 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:** \_\_\_\_\_

Phillip Cluley, Department Head for Computer Technology  
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**Approved by:** \_\_\_\_\_

Date: \_\_\_\_\_

Joel D. Welch, Ph.D., PE  
Dean, Technology Division

*This syllabus will remain in effect until revised or reviewed no later than August 2016.*

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**COURSE SYLLABUS**

**Course Title:** LAN Directory Services

**Course Number:** IST 258

**Lecture hours per week:** 3.0

**Lab/Clinic Hours:**

**Semester credit hours:** 3.0

**Prerequisites:** 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) and 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.

*Revised December 31, 2012*

<b>COMPUTER TECHNOLOGY PROGRAM LEVEL STUDENT LEARNING OUTCOMES</b>
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Upon successful completion of the Computer Technology Degree students will be able to:

1. Install computer and network hardware.
2. Install computer operating systems and application software.
3. Design, create and test computer programming solutions.
4. Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing “hands-on” computer assignments.
5. Analyze, troubleshoot, and correct computer related technical problems.

*Revised August 2012*

<b>IST 258 COURSE OUTCOMES</b>
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Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

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 Computer Technology program level student learning outcomes.*

<b>IST 258 – MAIN TOPICS</b>
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**PLAN OF INSTRUCTION:**

**TEXT**

<b><u>CHAPTER</u></b>	<b><u>MAJOR TOPICS</u></b>
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Chapter 1	Introduction to Windows Server 2008 <ol style="list-style-type: none"><li>1. The Role of a Server Operating System</li><li>2. Windows Server 2008 Editions</li><li>3. Windows Server 2008 Roles</li></ol>
Chapter 2	Installing Windows Server 2008 <ol style="list-style-type: none"><li>1. Planning a Windows Server 2008 Installation</li></ol>

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**

***The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content.***

<b>IST 258 – COURSE SPECIFIC REQUIREMENTS</b>
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There are no specific course requirements other than attachment 1.

<b>IST 258 – EVALUATION AND GRADING INFORMATION</b>
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**Grades will be calculated as follows:**

Major Tests	60 percent
Attendance, Homework, and Labs	15 percent
Final Exam (70% written portion, 30% hands-on portion)	25 percent

**NOTE: ALL 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