GREENVILLE TECHNICAL COLLEGE

Business and Technology Division
Computer Technology
Course Syllabus
LAN Directory Services IST 258

Credit/Contact Hours:
3.0

Prerequisite:
IST 257

Co-requisite:
None

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 and 2012* will be used in this course.

Purpose of Course:
Provide students with the knowledge and skills necessary to understand, install, configure, and administer directory services with a Windows 2008 and a Windows 2012 Server network operating system.

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Required Texts:

1. MCSA Guide to Installing and Configuring Microsoft Windows Server 2012/R2; Greg Tomsho Cengage ISBN 13:9781285868653; ISBN 10: 128586865x
2. 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

3. 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.

Additional Materials:
There are no specific course requirements other than attachment 1.

Course Outcomes:
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. Install and Configure Windows Server 2012. Configure TCP/IP, DNS and DHCP on a 2012 Server.

4. Install the Windows Server 2008 operating system and configure domain controllers, DNS servers, and Group Policy.

The objectives of the IST 258 course are intended to meet the Computer Technology program level student learning outcomes.

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Program Student Learning Outcomes:

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

Greenville Technical College Core Competencies:

Communication Core Competency: Students will demonstrate effective written and oral communication skills to convey information, ideas, or opinions.

- Written Communication: Students will demonstrate effective written communication skills to convey information, ideas, or opinions.
- Oral Communication: Students will demonstrate effective oral communication skills to convey information, ideas, or opinions.

Critical Thinking Core Competency: Students will demonstrate effective reasoning, problem solving, or quantitative skills to develop an opinion or conclusion.

- Critical Reasoning: Students will employ inquiry, analysis, and synthesis of information to formulate and/or evaluate an opinion or conclusion.
- Problem Reasoning: Students will design and formulate a strategy to answer a question or achieve a desired goal.
- Quantitative Reasoning: Students will be able to analyze numerical information or observable facts resulting in informed conclusions.

Information Literacy Core Competency: Students will be able to locate, evaluate, and use information effectively from diverse sources.

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Professionalism Core Competency: Students will demonstrate conduct and etiquette appropriate to the community and chosen career.

- Professionalism: Students will display professional conduct and work habits.
- Teamwork: Students will collaborate with others to accomplish a shared goal.

Instructional Agreement:

This syllabus is an agreement between the student and instructor concerning course objectives, course content, grading and other policies and procedures particular to the course as well as any posted program, departmental, and divisional policies. It is also the student's responsibility to become familiar with the Student Handbook/College Catalog found in the Student Resource area of Blackboard.

Grading Scale:
Grades will be calculated as follows:

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

Course Policies:

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IST 258 – MAIN TOPICS

PLAN OF INSTRUCTION:

 TEXT

CHAPTER **MAJOR TOPICS**

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 9 (S2012) Configuring TCP/IP

1. IPv4Addresses

2. Internet Protocol Version 6

3. Transitioning from IPv4 to IPv6

Chapter 10 (S2012) Configuring DNS

1. Introduction to Domain Name System

2. Installing and Configuring DNS

3. Configuring DNS Zones

Chapter 11 (S2012) Configuring Dynamic Host Configuration Protocol

1. Installing and Configuring a DHCP Server

2. DHCP Server Configuration

3. DHCP Relay Agents

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Test #3 – Chapters – Server 2012 Chapters 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 –Cumulative Written and Hands-On Portion

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

Disabilities Information

Students with disabilities, including those who were served in Special Education (resource or tutorial), should contact Student Disability Services (SDS) to discuss their need for services and accommodations. The main SDS office is located on the Barton Campus in the Student Center Building 105, office 113.

Staff can be reached by phone at 864 250-8202 or via email to DisabilityServices@gvltec.edu . Appointments are available at all satellite campus locations. Please check the GTC website for more information concerning Student Disability Services: http://gvltec.edu/disability-services/

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Efforts have been made to ensure all materials presented in an electronic format are accessible for students with disabilities and the college is committed to this obligation. However, if you experience any difficulty accessing these materials please notify your instructor immediately so a solution can be provided. You may also contact Student Disability Services directly at 864-250-8202 or by email at DisabilityServices@gvltec.edu.

Students who need a PDF reader for accessibility of course documents presented in PDF format may download a free reader at https://acrobat.adobe.com/us/en/products/pdf-reader.html

Starfish

We care about your success! Greenville Technical College is proud to offer Starfish, a software tool designed to promote student success through coordination and communication between students, instructors and support staff.

When you set up your profile in Starfish, you can connect with services, faculty and staff at Greenville Technical College. The link to Starfish is located in Blackboard. Throughout the term, you may receive emails regarding your attendance, course grades or academic performance.

To benefit from this software, it is important that you check your Greenville Technical College Gmail regularly and read the Starfish alerts. If your academic performance begins to drop, you may also be contacted directly by a Success Coach or the Student Success Center.

Start, Stay, Succeed!