GREENVILLE TECHNICAL COLLEGE

School of Business and Computer Technology
Computer Technology
Course Syllabus
LAN Network Technologies IST 257
Fall 2019

Credit/Contact Hours:
3.0

Prerequisite:
CPT 257

Co-requisite:
None

Course Description:
A study of network operating system technologies including network operating system architecture, the installation, configuration, monitoring, and troubleshooting of network

resources, and network administration functions such as user/group maintenance, network security, print services, remote access, fault tolerance, backup, and recovery. Note: Course correlates with Microsoft Windows 2016 Server.

Purpose of Course:
Provide students with the knowledge and skills necessary to understand, install, configure, and administer the Windows 2016 Server network operating system.

PLAN OF INSTRUCTION:

**TEXT
CHAPTER   MAJOR TOPICS**

Chapter 1 – Introduction to Windows Server 2016
1. Windows Server 2016 Editions
2. Windows Networking Models
3. Implementing TCP/IP

Chapter 2 – Installing Windows Server 2016
1. Performing a DVD-Based Installation
2. Server Core
3. Installing and Managing Service Packs

Chapter 3 – Configuring the Windows Server 2016 Environment
1. Using Server Manager
2. Installing and Removing Server Rolls
3. Configuring the Operating System
4. Windows Powershell

Test #1 – Chapters 1, 2, and 3

Chapter 4 – Introduction to Active Directory and Account Management
1. Active Directory Basics
2. Containers in Active Directory
3. User Account Management
4. Security Group Management
5. Implementing User Profiles

Chapter 5 – Configuring, Managing and Troubleshooting Resource Access
1. Managing File and Folder Security
2. Configuring Shared Folders and Shared Folder Permissions
3. Implementing DFS

Chapter 6 – Configuring Windows Server 2016 Printing
1. Installing and Local and Shared Printers
2. Configure Printer Properties
3. Managing Print Jobs

Test #2 – Chapters 4, 5, and 6

Chapter 7 – Configuring and Managing Data Storage
1. Disk Management
2. Introduction to Fault Tolerance
3. Disk Backup

Chapter 8 – Managing Windows Server 2016 Network Services
1. Installing DNS Services
2. Implementing DHCP
3. Implementing Microsoft Internet Information Services

Chapter 9 – Configuring Remote Access Services
1. Configuring a VPN Server
2. Connecting Through Remote Desktop Services

Chapter 10 – Securing Windows Server 2016
1. Introduction to Group Policy
2. Securing Windows Server 2016 Using Security Policies
3. Configuring NAT

Test #3 – Chapters 7, 8, 9, and 10

Chapter 11 – Server and Network Monitoring
1. Monitoring Server Services
2. Using the Task Manager
3. Using the Performance Monitor
4. Using Data Collector Sets

Chapter 12 – Managing System Reliability
1. General Problem Solving
2. Resolving Boot Problems
3. Using and Configuring the Event Viewer
4. Troubleshooting Connectivity

Prepare for Final Exam

Final Exam – Chapters 1-12 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.

Required Texts:
1. Hands-On Microsoft Windows Server 2016; Michael Palmer;
   Course Technology/Thomson Learning; ISBN 13:9781305078628; ISBN 10:
   1305078624
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, Supplies, Equipment, and Technology (i.e. Webcams):
SPECIAL NOTE TO ONLINE STUDENTS: Online students will be REQUIRED to come to the Barton Campus to complete hands-on labs. The number of required on-campus

meetings will vary from class to class. Students should plan on at least 3 to 4 meetings. Online students will be required to complete the labs to satisfactorily complete the course. Also, the final examination for online students will be administered on the Barton Campus. The final examination will be scheduled at a time determined by the administration

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 Resources area of Blackboard.

Grading Scale:

Grades will be calculated as follows:

Major Tests	60 percent
Attendance, Homework, and Labs 1	5 percent
Final Exam	25 percent

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

Pass/Non-Pass Course Grade Option:

This course may be eligible for the Pass/Non-Pass Course Grade Option. A student must request this option prior to the withdrawal date of this course. If approved for this option, a grade of P will be assigned if the student earns a grade of C or higher. A grade of NP will be assigned for earning a D or F. Students are encouraged to talk with their instructor and meet with an advisor prior to requesting this option. Additional information may be found in the college catalog.

Instructional Continuity:

In the event of a disruption to the normal class schedule or planned activities for this course, alternate learning activities that may include other methods of instruction or locations may be implemented. If disruption occurs, your instructor will communicate through your GTC email (Gmail) account. Additionally, please make sure your contact information is accurate in GTC's emergency alert system (accessible in GTC4Me/Quick Access/GTC2me – Emergency Messaging).

Verification of Student in Online Classes:

Greenville Technical College is committed to student learning and the academic integrity of all courses. All GTC online courses are required to have at least one proctored learning activity that constitutes a significant percentage of the course grade, which may include a test, midterm, final exam, presentation or other assignment. Proctored is defined as an experience where an approved person ensures the identity of the student and monitors the learning activity. The proctored learning activity will be

determined by the course instructor. The method of proctoring and any additional requirements, such as costs for students and/or trips to campus or approved testing center, will be explained in the course schedule/plan of instruction.

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 2016 Editions, assess hardware requirements, configure the Server 2016 environment and troubleshoot performance issues.

2. Implement and administer Active Directory, user accounts, groups, printers, shared folders and file permissions.

3. Configure data storage, DNS, WINS, DHCP, RAS and Group Policy

4. Install the Windows Server 2016 operating system, create a domain controller and configure related objects in a domain environment including user accounts, groups, printers, network drives, shared folders and file permissions.

The objectives of the IST 257 course are intended to meet the Computer Technology program level student learning outcomes.

Assessment of Student Learning:
Greenville Technical College is committed to continuous improvement of teaching and learning. Tests, assignments, and/or projects required in this course may be shared with college faculty and used for assessment purposes. Also, student input is necessary for improving instruction and is requested through course evaluations. Students will be notified when evaluations are available.

Administrative Withdrawals:
Students may be administratively withdrawn from this course for the following reasons:

- Not attending a course during the drop/add period including failure to meet the attendance criteria in an online course. In this case, a grade of WA will be assigned. This WA will not count as an attempt and will not affect GPA.
- For recorded absences exceeding 15% of the course contact hours prior to the withdrawal date. A grade of W will be assigned. For students who receive financial aid, this W will count as a course attempt but will not affect GPA.
- For non-attendance for 14 consecutive calendar days during any time in a semester (including non-class days, holidays, and weekends). A grade of FA (Failure due to Absences) will be assigned. For students who receive financial aid, this FA will count as a course attempt and will affect GPA. The college will use a grade point of zero for each credit hour to calculate the student's GPA.

Course Policies:
Computer Technology students must obtain a minimum grade of "C" in all CPT and IST courses.
Please refer to Departmental Polices in Blackboard to review additional course and department policies.

Revised August 2018

Students with Disabilities:
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. ***This must be done each term***. The main SDS office is located on the Barton Campus in the Student Center Building 105, office 113.

Students may reach staff 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. Visit http://gvltec.edu/disability-services for more information.

The college is committed to providing materials that are accessible to all students. However, if you experience any difficulty accessing materials, please notify your instructor immediately so that we can provide a solution. 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 to access course documents presented in PDF formats may download Adobe Reader from https://get.adobe.com/reader.

Blackboard Ally

Blackboard Ally is a tool to improve students' experiences within online courses. It enables students to convert files in a course to more accessible formats such as HTML, electronic braille, audio and more. For more information, refer to Blackboard Ally for Students located in Student Resources in the course menu.

Technology Statement:
Greenville Technical College is not responsible for personal technology or internet access. Problems with computers, devices, or internet access are not acceptable for late work. When completing gradable coursework online, be sure to access a secure, reliable internet connection (preferably hardwired).

All technical questions should be directed to technical support. For details, visit https://www.gvltec.edu/about_greenvilletech/tech_support.

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Students can access due dates for all assignments and quizzes/tests on the Course Schedule/Plan of Instruction. All graded work is time-stamped when submitted, so your instructor can check the time of submission. In addition, you will receive a confirmation email message when you submit assignments via Blackboard. You must provide this confirmation information in case of any dispute regarding the submission.

Computer labs are available at multiple campus locations and offer various hours as well as staff who are available for assistance. For more information, please visit https://www.gvltec.edu/student_resources/computer_labs.

Student should use Microsoft Office programs or PDF format for submitting assignments in Blackboard. Students can access http://portal.office.com, log in with their <username>@my.gvltec.edu email address and Blackboard/GTC4me password, then follow the prompts to install Microsoft Office free of charge.

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. The link to Starfish is located in Blackboard.

Inside Starfish, you will find your Student Success Team with your instructor, advisor, academic coach, and others you may be directly connected with at the college. Setting up your Starfish profile and completing the Starfish Intake form will provide your Success Team with valuable information to guide your success.

Throughout the semester, you may receive emails regarding your attendance, academic performance, or course grades. Additionally, faculty and staff may send kudos celebrating successes. It is important that you check your Greenville Technical College Gmail regularly for Starfish alerts and kudos.

FERPA Policy:
Because Greenville Technical College abides by FERPA privacy guidelines, personal email accounts may not be used for any College-related communication. Faculty and students must use the college Gmail system only.

Start, Stay, Succeed!