

Implementing and Supporting Client Operating Systems (ITNW 1308)



Credit: 3 semester credit hours (2 hours lecture, 4 hours lab)

Prerequisite/Co-requisite: None

Course Description

The fundamentals of managing and configuring network clients.

Required Textbook and Materials

1. *70-687 Configuring Windows 8.1 with Lab Manual Set* by Microsoft Official Academic Course, Wiley, 2014.
 - a. ISBN 978-1-118-96678-5
2. Computer Networking and Troubleshooting Technology students are required to have one portable external Hard Drive with a capacity of 500GB or larger to be used for the duration of the time to complete their respective degree.

Course Objectives

Upon completion of this course, the student will be able to:

1. Install and configure network clients
2. Setup users, groups, policies, and profiles
3. Configure hardware components and applications
4. Setup and maintain a logon security and security for files and printers
5. Configure and optimize clients in multiple environments

Course Outline

1. Evaluating Hardware Readiness and Capability
 - a. Introducing Windows 8.1
 - b. Introducing Windows 8.1 Editions
 - c. Understanding Windows 8.1 System Requirements
 - d. Selecting Installation Options
 - e. Running Windows 8.1 Upgrade Assistant
 - f. Identifying Upgrade Paths
2. Installing Windows 8.1
 - a. Understanding the Windows 8.1 Boot Environment
 - b. Performing a Clean Installation
 - c. Upgrading to Windows 8.1
 - d. Installing Windows To Go
3. Migrating and Configuring User Data
 - a. Configuring User Profiles

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- b. Migrating User Profiles
 - c. Configuring Folder Location
 4. Working with Disks and Devices
 - a. Working with Devices and Drivers
 5. Installing and Configuring Desktop Apps and Windows Store Apps
 - a. Configuring Program Defaults
 - b. Configuring Application Compatibility
 - c. Installing and Configuring Windows Store Apps
 - d. Disabling the Windows Store
 6. Controlling Access to Local Hardware and Applications
 - a. Configuring Hardware Restrictions
 - b. Configuring Application Restrictions
 - c. Configuring Assigned Access
 7. Configuring Internet Explorer 11 and Internet Explorer for the Desktop
 - a. Administering Internet Explorer
 - b. Securing Internet Explorer
 8. Configuring Hyper-V
 - a. Creating Virtual Machines with Hyper-V
 - b. Managing Checkpoints
 - c. Managing Virtual Switches
 - d. Creating Virtual Hard Disks
 9. Configuring IP Settings
 - a. Networking Basics
 - b. Connecting to a Network
 - c. Using TCP/IP Tools
 10. Configuring Network Settings
 - a. Configure Network Settings
 - b. Connecting to Wireless Networks
 - c. Managing Preferred Wireless Networks
 - d. Configuring Network Adapters
 - e. Configuring Location-Aware Printing
 11. Configuring and Maintaining Network Security
 - a. Defending Against Malware
 12. Configuring Remote Management
 - a. Using Remote Access Technologies
 13. Configuring Shared Resources
 - a. Sharing Files and Folders
 - b. Using OneDrive
 - c. Working with Printers
 14. Configuring File and Folder Access

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- a. Managing Permissions
 - b. Using the Encrypting File System
 - c. Configuring Disk Quotas
 - d. Configuring File Access Auditing
15. Configuring Authentication and Authorization
- a. Working with Users and Groups
 - b. Creating and Managing Local Users and Groups
 - c. Authenticating and Authorizing Users
 - d. Configuring User Account Control (UAC)
16. Configuring Remote Connections
- a. Using BranchCache
 - b. Using Remote Network Connections
17. Configuring Mobility Options
- a. Using Windows Mobility Controls
 - b. Using Wi-Fi Direct
 - c. Configuring Windows To Go
18. Configuring Security for Mobile Devices
- a. Securing Your Mobile Devices
19. Configuring and Managing Updates
- a. Configuring Update Settings
 - b. Configuring Windows Update Policies
 - c. Viewing Update History
 - d. Rolling Back Updates
 - e. Updating Windows Store Apps
20. Managing Local Storage
- a. Working with Disks
21. Monitoring System Performance
- a. Monitoring and Diagnosing Performance
 - b. Managing Performance
 - c. Troubleshooting Windows 8.1
22. Configuring System Recovery
- a. Performing System Recovery of Windows 8.1
23. Configuring File Recovery
- a. Recovering Windows 8.1 Files

Grade Scale

- 90 – 100 A
- 80 – 89 B
- 70 – 79 C
- 60 – 69 D

0 – 59 F

Course Evaluation

Final grades will be calculated according to the following criteria:

Labs	30%
Study Guides	10%
Chapter Tests	30%
Final Exam	30%

Course Requirements

1. Demonstrate proficiency through hands-on labs as assigned.
2. Complete Study Guides and work sheets as assigned.

Course Policies

1. No food, drinks, or use of tobacco products in class.
2. Electronic devices not being used for the class, such as phones and headphones, must be turned off while in class.
3. Do not bring children to class.
4. Certification. If a student passes the certification test that is associated with this class, you will receive an “A” on the final exam and credit for 25% of your labs. If you have missed a previous test, you must still take the final exam to substitute for that grade.
5. Attendance Policy. Three absences are allowed. If a student is tardy to class or departs early three (3) times, it will be equal to one (1) absence. Each absence beyond three absences will result in a 2 point deduction from your final grade.
6. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an ‘F’ in the course.
7. Tools. Return all tools and/or software to their designated place.
8. A grade of ‘C’ or better must be earned in this course for credit toward degree requirement.
9. Additional course policies, as defined by the individual course instructor, will be outlined in the course addendum and provided by the instructor.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Technical Requirements (for courses using Blackboard)

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at:

https://help.blackboard.com/en-us/Learn/9.1_2014_04/Student/015_Browser_Support/015_Browser_Support_Policy

A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources.

Student Code of Conduct Statement

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the LIT Catalog and Student Handbook. The LIT Catalog and Student Handbook may be accessed at www.lit.edu or obtained in print upon request at the Student Services Office. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

Certification Requirement

CNTT majors are required to earn certification in one of the following areas prior to graduation.

- A+ Certification
- Cisco Certified Entry Network Technician (CCENT)
- Cisco Certified Network Associate (CCNA)
- Microsoft Certified Solutions Associate (MCSA)

This course covers the material to prepare for Microsoft's Configuring Windows 8.1 certification, exam number 70-687. This exam, along with 70-688, applies as credit toward the MCSA: Windows 8. Students are responsible for scheduling and paying for the certification through the LIT Testing Center. More information about the certification can be found online at <https://www.microsoft.com/en-us/learning/exam-70-687.aspx>.

Course Schedule

Week of	Topic	Reference
Week 1	Course introduction and policies	
	Evaluating Hardware Readiness and Capability	pp. 1-25
Week 2	Installing Windows 8.1	pp. 26-53
Week 3	Migrating and Configuring User Data	pp. 54-69
	Working with Disks and Devices	pp. 70-87
Week 4	Installing and Configuring Desktop Apps and Windows Store Apps	pp. 88-108
Week 5	Configuring Access to Local Hardware and Applications	pp. 109-124
	Configuring Internet Explorer 11 and Internet Explorer for the	

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Week of	Topic	Reference
	Desktop	pp. 125-150
Week 6	Configuring Hyper-V	pp. 151-172
	Configuring IP Settings	pp. 173-208
Week 7	Configuring Network Settings	pp. 209-230
Week 8	Configuring and Maintaining Network Security	pp. 231-248
	Configuring Remote Management	pp. 249-265
	Configuring Shared Resources	pp. 266-298
Week 9	Configuring File and Folder Access	pp. 299-325
Week 10	Configuring Authentication and Authorization	pp. 326-372
Week 11	Configuring Remote Connections	pp. 373-392
	Configuring Mobility Options	pp. 393-419
Week 12	Configuring Security for Mobile Devices	pp. 420-432
	Configuring and Managing Updates	pp. 433-451
Week 13	Managing Local Storage	pp. 452-480
	Monitoring System Performance	pp. 481-517
Week 14	Configuring System Recovery	pp. 518-533
Week 15	Configuring File Recovery	pp. 534-541
Week 16	Final Exam	

Contact Information:

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