

# 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

MindTap for Microsoft 365 Modern Desktop Administrator Guide to Exam MD-100: Windows 10, 1st Edition; Cengage, 2022 [www.cengage.com](http://www.cengage.com)

*Online Homework Platform—MindTap*

ISBN-10: 0357501810 | ISBN-13: 9780357501818

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

## Course Outline

1. Introduction to Windows 10
  - a. Understanding Operating Systems
  - b. Windows 10 Editions
  - c. Installing Windows 10
  - d. Licensing Windows 10
  - e. Activating Windows 10
  - f. Using Windows 10
  - g. Windows 10 Networking Models
2. Using the System Utilities
  - a. Settings Over
  - b. Administrative Tools
  - c. Command-Line Administration Tools
  - d. Display
  - e. Managing Optional Features

- f. Hardware Management
  - g. Power Management
  - h. Task Scheduler
- 3. User Management
  - a. User Accounts
  - b. Creating and Managing User Accounts
  - c. Managing User Profiles
  - d. Start Menu and Taskbar Customization
  - e. Advanced Authentication Methods
  - f. Network Integration
- 4. Networking
  - a. IP Version 4
  - b. IP Version 6
  - c. Internet Connectivity
  - d. Wireless Networking
  - e. Windows Defender Firewall
- 5. Managing Disks and File Systems
  - a. Disk Technology
  - b. Disk Partition Styles
  - c. Disk Types
  - d. Disk Management Tools
  - e. Managing Physical Disks
  - f. Virtual Disk Management Tasks
  - g. Managing Storage Spaces
  - h. File Systems
  - i. File System Tasks
  - j. File and Folder Attributes
  - k. File and Folder Permissions
  - l. File Sharing
- 6. Windows 10 Security Features
  - a. Windows 10 Security Policies
  - b. Auditing
  - c. User Account Control
  - d. Malware Protection
  - e. Data Security
  - f. Windows Update
- 7. User Productivity

- a. File Explorer
  - b. OneDrive
  - c. Printing
  - d. Browsers
  - e. Accessories and Shortcuts
8. Windows 10 Application Support
- a. Application Environments
  - b. The Registry
  - c. Installing Apps
  - d. App Compatibility
  - e. Remote Desktop Services
9. Performance Tuning and System Recovery
- a. Performance Tuning Overview
  - b. Performance Monitoring Tools
  - c. Performance Options
  - d. Controlling Application Startup
  - e. Troubleshooting Windows 10 Errors
  - f. Load File Recovery and Backup
  - g. System Recovery
10. Enterprise Computing
- a. Active Directory
  - b. Group Policy
  - c. Enterprise Management Tools
  - d. Enterprise File Services
  - e. Microsoft Cloud Services
11. Managing Enterprise Clients
- a. Troubleshooting and Managing Enterprise Clients
  - b. Managing Profiles for Roaming Users
  - c. Using a VPN for Remote Access
  - d. Synchronizing Data for Mobile Clients
12. Automating Windows 10 Deployment
- a. Windows 10 Installation Methods
  - b. Windows 10 Installation Types
  - c. Windows 10 Assessment and Deployment Kit
  - d. Unattended Installation
  - e. Preparing Windows 10 for Image
  - f. Using DISM for Imaging
  - g. Provisioning
  - h. Enterprise Deployment Tools

## **Grade Scale**

90 – 100 A

80 – 89 B

70 – 79 C

60 – 69 D

00 – 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.
7. 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.
8. Do not bring children to class.
9. 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.
10. 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.
11. 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.
12. Tools. Return all tools and/or software to their designated place.
13. A grade of ‘C’ or better must be earned in this course for credit toward degree requirement.
14. 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 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles’ Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please

contact the Special Populations Coordinator at (409)839-2018. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](http://SpecialPopulations-LamarInstituteofTechnology.lit.edu)

### **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](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](http://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
- Network+ Certification
- Security+ Certification
- Cisco Certified Network Associate (CCNA)

ITNW 1308  
Course Syllabus