

ITMO 433 SYLLABUS**ITMO 443 Windows Enterprise Server Administration**

Hours: 3 credit hours / 60 contact hours

Instructor: Louis F. McHugh IV

Textbook, title, author, and year: *Microsoft Official Academic Course: Installing and Configuring Windows Server 2012*, Craig Zacker, 2014

Specific course information

- a. **Catalog Description:** Students learn to set up, maintain, and administer x86-based servers and associated networks using a contemporary industry-standard proprietary operating system. Topics include hardware requirements; software compatibility; system installation, configuration and options, and post-installation topics; administrative and technical practices required for system security; process management; performance monitoring and tuning; storage management; back-up and restoration of data; and disaster recovery and prevention. Also addressed is configuration and administration of common network and server services such as DNS, DHCP, remote access, email, basic virtualization, web and web services, and more.
- b. **Prerequisites:** ITM 301 and ITMO 340/540

Specific goals for the course

- a. **Course Outcomes:** Upon completion, a student should be able to:
 - Setup Active Domain within a Client Server Environment
 - Administer x86-based servers such as Windows Enterprise Server 2012
 - Configure server, network, and software applications setup environment
 - Explain a server administrator's responsibilities and support of enterprise applications
 - Analyze server recurring issues and work on sustainable solutions
 - Provide support planning, development, integration, testing and management of IT services
- b. **Course student outcomes:** Each successful student will demonstrate foundation knowledge and application of the following skills:
 - Install and manage Windows Enterprise Server and Active Directory Domain
 - Manage server, active directory, client computers and users
 - Apply server security, software distribution and updates

- Perform schedules vulnerability-assessment scans and monitoring server performance
- Design Infrastructure requirements
- Setup and manage server system virtualization
- Demonstrate day-to-day management of the server operating system, file structure, and directory services
- Monitor logs for firewalls and intrusion detection systems

Topics to be covered

- a. Introduction, Setting up MLO
- b. Installing Servers,
- c. Configuring Servers
- d. Configuring Local Storage
- e. Configuring File and Share Access
- f. Configuring Print and Document Services
- g. Configuring Servers for Remote Access
- h. Creating and Configuring Virtual Machine Settings
- i. Creating and Configuring Virtual Machine Storage
- j. Creating and Configuring Virtual Machine Networks
- k. Configuring IPv4 and IPv6 Addressing
- l. Deploying and Configuring DHCP
- m. Deploying and Configuring DNS
- n. Installing Domain Controllers
- o. Creating and Managing Active Directory (AD) Users and Computers
- p. Creating and Managing Active Directory (AD) Groups and Organizational Units
- q. Creating Group Policy Objects (GPO)
- r. Configuring Security Policies
- s. Configuring Application Restriction Policies
- t. Configuring Windows Firewall