

# LINC 89: INTRODUCTION TO MICROSOFT WINDOWS SERVERS

## Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2024
Units:	4
Hours:	3 lecture, 3 laboratory per week (72 total per quarter)
Advisory:	Basic computer skills and knowledge of Macintosh or Windows operating systems; familiarity using web browsers, email, bookmarking, searching, and downloading.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

## Student Learning Outcomes

- Configure network service protocols
- Install a Windows Server

## Description

Introductory course, covering the fundamentals of Microsoft Windows server infrastructure, setup, and administration. Topics include managing file systems (including Active Directory Domain Services [AD DS]), networking services, Hyper-V configuration, devices, user accounts, backups, and basic security.

## Course Objectives

The student will be able to:

1. Install a Windows server
2. Configure network service protocols
3. Configure and manage data storage and printers
4. Use Remote Desktop Services and Virtual Desktop Infrastructure (VDI)
5. Deploy group policies for central management

## Course Content

1. Server concepts
  - a. Server vs. desktop computers
  - b. Purpose of server
  - c. Server configurations
  - d. Server operating systems
  - e. Hardware and devices
2. Installing and configuring a Windows server

- a. Introduction to Active Directory Domain Services
  - b. Implementing networking services
  - c. Implementing local storage
  - d. Implementing file and print services
3. Configure an Active Directory and manage server storage systems
    - a. Managing Active Directory Domain Services objects
    - b. Automating Active Directory Domain Services administration
    - c. Organizing with forests, domains, and sites
    - d. Raising domain and forest functional levels
    - e. Locating Flexible Single Master Operations (FSMO) roles
    - f. Configure server peripheral devices
    - g. Control and monitor server access
  4. Remote Desktop Services and Virtual Desktop Infrastructure (VDI)
    - a. Implementing Server Virtualization with Hyper-V
    - b. Implementing session-based desktop deployment
    - c. Configuring web access for RemoteApp programs
    - d. Pooled vs. personalized desktop collections
  5. Deploying group policies for central management
    - a. Contrasting computer/user policies and preferences
    - b. Locking down the desktop with administrative templates

## Lab Content

1. Windows Server Operating System Lab
2. Server Hardware Configuration Lab
3. Active Directory System Lab
4. Configure Server Peripheral Lab
5. Control Access Lab
6. Remote and Virtual Desktop Infrastructure Lab
7. Group Policies Lab

## Special Facilities and/or Equipment

1. When offered on/off campus: Lecture room equipped with projector, whiteboard, and a demonstration computer connected online. Computer laboratories equipped with computers or laptops with internet access.
2. When taught via the internet: Students must have current email accounts and ongoing access to computers with web browsing capability and internet access.

## Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Completion of written homework assignments and lab reports  
 Class performance with demonstrations  
 Quizzes  
 Final exam

## Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Students will actively take notes during lectures and demonstrations  
 Students will be actively engaged in individual learning practices  
 Students will conduct online research  
 Students will complete lab work

Students will meet with other students in one-on-one sessions or small group instruction

## **Representative Text(s) and Other Materials**

van Biljon, Edward. Microsoft Exchange Server 2019 Administration Guide: Administer and Manage End-to-End Enterprise Messaging, Business Communication, and Team Collaboration. 2021.

Instructor-assigned notes, materials, and resources, including instructional materials, open education resources, multimedia, and websites.

## **Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments**

1. Weekly reading assignments from the text, online curriculum, instructor's chapter notes, PowerPoint, and outside sources, 20-40 pages weekly

## **Discipline(s)**

Computer Service Technology or Instructional Design/Technology