

**LAGUARDIA COMMUNITY COLLEGE CITY UNIVERSITY OF NEW YORK
DEPARTMENT OF MATHEMATICS, ENGINEERING, and COMPUTER SCIENCE**

MAC233 Windows NT Network Operating System

4 hours (2 lecture, 2 lab), 3 credits

Prerequisites: MAC101 or MAC108

Prerequisite: CSE099, ENA/ENG099/ENC101

Catalog Description:

This course will provide the student with a comprehensive knowledge of the Microsoft Windows Server 2019 Operating system and networking environment. Topics to be covered include an overview of the system architecture, the network environment, administration, security, and optimization. Students will be in a computer lab to learn the skills needed to install and configure Server 2019 systems and workstations and servers. This course will prepare students to obtain practical experience of working with Azure Services and Azure administration.

Instructional Objectives:

1. To familiarize the student with the various components of Windows Server 2019 from a user's perspective.
2. To familiarize the student with the various Windows Server 2012 components from a systems perspective.
3. To introduce the students to the steps needed to install Windows Server 2019 on a stand-alone computer.
4. To introduce the students to the steps needed to install Windows Server 2019 on a computer connected to a network.
5. To provide the student with a comprehensive overview of system security.
6. To introduce the student to the administration of a Windows Server 2019 networking environment.
7. To familiarize the student with the methods of remote access to Windows Server 2019.
8. To familiarize the student with Windows Server 2019's printing services.
9. To familiarize the student with the methods used for performance optimization.
10. To Provide the student with a mixture of group and individual lab work with Windows Server 2019.

Student Learning Outcomes:

1. Describe common characteristics of the Windows Server 2019 Network Operating System.
2. Describe the Windows Server 2019 system from a systems prospective.
3. Illustrate the installation of Windows Server 2019 on a PC.
4. Illustrate the installation of Windows Server 2019 on a PC connected to a network.
5. Explain system security.
6. Illustrate administration of a Windows Server 2019 networking environment.
7. Illustrate remote access of Windows Server 2019.
8. Prepare a Windows Server 2019 printing service.
9. Analyze a system for performance optimization.

10. Work alone and in a group setting with Windows Server 2019.
11. Demonstrate knowledge of the course material through written exams and laboratory projects.

Textbook:

Hands-On Microsoft Windows Server 2019, 3rd Edition, by Jason W. Eckert Trios College;
 Publisher: CENGAGE Learning, Copyright: 2019, Format: Paper;887 pp
 Published: 2019 ISBN-10:0-357-43615-6 ISBN-13: 978-0-357-43615-8

Grading Standards:

Midterm	30%
Individual Lab Projects (4@ 5%)	20%
Group Lab Projects (2 @ 10%)	20%
Final	30%
Total	100%

Grading Chart:

Grade	F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A
Cut Point	0	60	63	66	70	73	76	80	83	86	90	93

Academic Integrity:

This class will be conducted in compliance with LaGuardia Community College’s academic integrity policy.

Attendance:

The maximum number of unexcused absences allowed is 15% of the total class meetings (about 7 hours). Unexcused absences beyond this maximum will result in grade of WU or F.

Comments:

The grading standard listed above and the suggested homework problems listed in the course outline are both subject to modification by the instructor.

COURSE OUTLINE

Weeks	Topic	Chapter
Week 1	Introduction to Windows Server 2019 Installing Windows Server 2019	Chapter 1
Week 2	Configuring the Windows Server 2019 Environment Introduction to Active Directory and Account Management.	Chapter 2
Week 3	More Introduction to Active Directory and Account Management Configuring, Managing, and Troubleshooting Resource Access .	Chapter 3
Week 4	More Configuring, Managing, and Troubleshooting Resource Access Configuring Windows Server 2019 Printing.	Chapter 4
Week 5	Configuring and Managing Data Storage.	Chapter 5
Week 6	Managing Windows Server 2019 Networking Services.	Chapter 6
Week 7	More Managing Windows Server 2019 Networking Services Deploying IIS and Active Directory Certificate Services	Chapter 7
Week 8	Configuring Remote Access Services.	Chapter 8
Week 9	Windows Server 2019 Virtualization Applications and Data Provisioning.	Chapter 9
Week 10	Securing Windows Server 2019	Chapter 10
Week 11	Server and Network Monitoring Managing System Reliability and Availability	Chapter 14
Week 12	Certification Exam Preparation and Review .	
Week 13	Final Examination	Covers 1-10