

ITNW-1354-028IN-FA2022

Implementing and Supporting Servers

Fall 2024

Internet Course – Online Only

Instructor Information: Betty Caldwell, BCaldwell@com.edu, 409-933-8392 or 832 656 9663

Student hours and location: By appointment (Email to confirm availability)

Textbook:

Hybrid Server Pro: Core (TestOut)

ISBN: 978-1-93508080-84-8

14 day code for TestOut A4UD-57BD-UMDD-NAUD-23H9

Prepares for these certification: Testout Client Pro and Microsoft MD-102

Course requirements: Must have access to a computer.

Determination of Course Grade/Detailed Grading Formula:

	#	Points Total
Discussion Topics	7	10
Lab Assignments	3	50
Lesson Quizzes	7	40
Final Exam	100	
Total		

Grading Scale:

A= 90 - 100

B= 80 - 89

C= 70 - 79

D= 60 - 69

F= Anything lower than 60

Late Work / Make-Up Policy: Late work will be accepted for one week after the due date with a points deduction of - 20%. Assignments are then removed from Brightspace and a grade of 0 is assigned.

Attendance Policy: Students are expected to attend all lectures (online or on-ground) and labs (online or on-ground). Students not able to attend a session are required to notify the instructor no later than 2 hours prior to the start of the session. Students that miss more than 35% of the total session times will be considered for student referral and possibly being dropped from the course. Students will need to log into the Brightspace system at least 1 time per week.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.

Course Outline:

Week to teach content:

Cover this content during specified week:

1st week	01.01: Course Introduction
1st week	01.02: Windows and Azure Simulator Interface
1st week	02.01: Server Installation
1st week	02.02: Windows Server Roles
1st week	02.03: Powershell
1st week	02.04: Windows Server Core
1st week	02.05: Windows Server Configuration and Management
1st week	02.06: Performance Monitor
1st week	02.07: Remote Management Options
1st week	03.01: Cloud Concepts
1st week	03.02: Azure Concepts
1st week	04.01: IP Addressing
1st week	04.02: Troubleshoot IP Configuration Issues
2nd week	04.03: Troubleshoot IP Communications
2nd week	04.04: DHCP
2nd week	04.05: DHCP Relay
2nd week	04.06: Advanced DHCP Management
2nd week	04.07: Troubleshoot DHCP

2nd week	04.08: IP Version 6
2nd week	04.09: IP Address Management (IPAM)
2nd week	04.10: NIC Teaming
2nd week	05.01: DNS
2nd week	05.02: Name Resolution
2nd week	05.03: Zone Management
2nd week	05.04: Troubleshoot DNS
3rd week	05.05: DNS Protection
3rd week	05.06: Implement Hybrid Name Resolution
3rd week	06.01: Active Directory
3rd week	06.02: Azure Active Directory
3rd week	06.03: Read-Only Domain Controllers (RODCs)
3rd week	06.04: FSMO Roles and Global Catalog Servers
3rd week	06.05: Active Directory Trusts
3rd week	06.06: Active Directory Sites
3rd week	06.07: Active Directory Replication
3rd week	06.08: Implement and Manage Hybrid Identities
3rd week	07.01: Active Directory Organizational Units
3rd week	07.02: Active Directory Computers
4th week	07.03: Active Directory Users
4th week	07.04: Active Directory Groups
4th week	07.05: Active Directory Service Accounts
4th week	07.06: Active Directory Bulk Operations
4th week	07.07: Delegation of Control
4th week	08.01: Group Policy
4th week	08.02: Group Policy Management
4th week	08.03: Password Policies

4th week	08.04: Audit Policies
4th week	08.05: User Rights Assignment
4th week	08.06: Security Options
4th week	08.07: Restricted Groups
5th week	08.08: Application Restriction Policies
5th week	08.09: Group Policy Preferences
5th week	09.01: Windows Admin Center
5th week	09.02: Windows PowerShell Remoting
5th week	09.03: Azure Arc
5th week	09.04: Azure Automation
5th week	09.05: Azure Monitor
5th week	09.06: Azure Security Center
5th week	09.07: Azure Policy
6th week	10.01: Configure Disk and Volumes
6th week	10.02: Configure and Manage Storage Spaces
6th week	10.03: Storage Replica
6th week	10.04: Data Deduplication
6th week	10.05: Manage Storage and Data Performance
6th week	10.06: Configure File Systems
6th week	10.07: NTFS Permission Troubleshooting
6th week	11.01: SMB Shares
6th week	11.02: FSRM Quotas and File Screens
6th week	11.03: BranchCache Installation and Configuration
6th week	11.04: Distributed File System (DFS) Namespaces
7th week	11.05: Configure and Manage Azure File Sync (Part 1)
7th week	11.06: Configure and Manage Azure File Sync (Part 2)
7th week	12.01: Virtualization Deployment

7th week	12.02: Virtual Machines
7th week	12.03: Virtual Machine Storage
7th week	12.04: Virtual Networks
7th week	12.05: Virtual Network Optimization
8th week	12.06: Virtual Machine Movement
8th week	12.07: VHD Storage
8th week	12.08: Hyper-V Replication
8th week	12.09: Hyper-V High Availability
8th week	12.10: Manage Azure Virtual Machines That Run Windows
8th week	12.11: Containers
8th week	13.01: Remote Access Role
8th week	13.02: Implement Azure Networking
8th week	13.03: Network Policy Server Role
8th week	13.04: Implement Web Application Proxy (WAP)
8th week	13.05: Virtual Private Networks (VPN)
8th week	13.06: Implement Azure Virtual WAN
8th week	13.07: Implement Azure AD Application Proxy
	Grand Total 100

Academic Dishonesty: Any incident of academic policy will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact the Math Department Chair, Leslie Richardson, at bcaldwell2@com.edu or 409-933-8392 or 832 656 9663. Please DO NOT call after 9pm.

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook. https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor’s professional judgment of the quality of*

the student's work and performance is also not an admissible basis for a grade appeal. https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact Michelle Brezina at 409-933-8124 or mvaldes1@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is October 5. The last date to withdraw from the 16-week session is November 18. The last date to withdraw for the 2nd 8-week session is December 1.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.