

MS Server Ntwk Infrastructure

CSIS - 2110 001

Course Description

This course covers topics that a student would need to prepare for the Windows Server Network Infrastructure exam. It is recommended students complete CSIS 1121 prior to taking this course.

Semester: Fall

Course Student Learning Outcomes

- Configure tools for the server, and appropriate settings for the client machines.

College Wide Student Learning Outcomes

- 1 - Acquire substantive knowledge
- 4 - Think critically & creatively
- 7 - Develop computer & information literacy

Course Prerequisites

1132 A+ 1200 Network Plus are recommended but not required.

Transfer/Certification/Licensure/Employment Information

Hybrid Server Pro I: Core provides comprehensive training aligned with the Microsoft Administering Windows Server Hybrid Core Infrastructure (AZ-800) objectives. It includes hands-on simulations, video lessons, and practice exams to ensure you are fully prepared to pass the certification exam.

Engagement Plan

Example language:

- I will respond to email within 48 hours. I will offer feedback on major assignments within 48 hours. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- In this course I will be posting interactive announcements which will offer specific opportunities for class questions and extra credit every other week.
- Additionally, I will be participating in the discussion forums with you to share my perspective within the discipline and to offer some nuances of interpretation that may not be present in your textbook.
- Lastly, we'll be holding small group Q & A sessions, where we can learn from our peers (and faculty) on some of the more difficult units within the course.

Keys for Success (how to succeed in the course)

You can proceed at your own pace as I do not insist on specific due dates for assignments. Everything is due the final day of the semester.

Required Text or Materials

Title: Hybrid Server Pro I: CoreEnglish 5.0

ISBN: 978-1-935080-84-8.

Publisher: CompTIA

Edition: English 5.0

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Brief Description of Assignments/Exams

The course includes:

- Hands-on simulations to practice real-world server administration tasks.
- Video lessons and instructional content aligned with AZ-800 objectives.
- Two full-length practice exams with performance-reporting data to track your readiness.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	1.1.2 - Exam Objectives Facts	Assignment	1
	1.2.1 - Navigate the Windows 10 Interface	Assignment	1
	1.2.10 - Use the Azure Interface	Assignment	2
	1.2.11 - Practice Questions	Assignment	10
	1.2.2 - Navigate the Windows 11 Interface	Assignment	1
	1.2.3 - Navigate the Windows Client Interface Facts	Assignment	1
	1.2.4 - Use the Windows Client Interface	Assignment	13

Due Date	Assignment Name	Assignment Type	Points
	1.2.5 - Navigate the Windows Server Interface	Assignment	1
	1.2.6 - Navigate the Windows Server Interface Facts	Assignment	1
	1.2.7 - Use the Windows Server Interface	Assignment	6
	1.2.8 - Navigate the Azure Interface	Assignment	1
	1.2.9 - Azure Interface Facts	Assignment	1
	12.10.10 - Enable Connectivity Between Azure Virtual Networks	Assignment	1
	12.10.11 - Manage Azure Virtual Machines Network Configuration Facts	Assignment	1
	12.10.12 - Practice Questions	Assignment	10
	12.10.4 - Resize Azure Virtual Machines Facts	Assignment	1
	12.10.5 - Configure Continuous Delivery for Azure Virtual Machines	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	12.10.6 - Configure Continuous Delivery for Azure Virtual Machines Facts	Assignment	1
	12.10.7 - Configure Connections to VMs	Assignment	1
	12.10.8 - Configure Connections to VMs	Assignment	2
	12.10.9 - Manage Azure Virtual Machines Network Configuration	Assignment	1
	12.11.1 - Windows Server Containers	Assignment	1
	12.11.2 - Container Facts	Assignment	1
	12.11.3 - Create Windows Server Container Images	Assignment	1
	12.11.4 - Create Custom Windows Server Container Images	Assignment	1
	12.11.5 - Manage Windows Server Container Images	Assignment	1
	12.11.6 - Configure Container Networking	Assignment	1
	12.11.7 - Manage Container Instances	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	12.11.8 - Practice Questions	Assignment	10
	13.1.1 - Remote Access	Assignment	1
	13.1.2 - Remote Access Facts	Assignment	1
	13.1.3 - Routing and Remote Access Role	Assignment	1
	13.1.4 - Add the Routing and Remote Access Role	Assignment	2
	13.1.5 - Practice Questions	Assignment	10
	13.2.1 - Implement and Manage Azure Network Adapter	Assignment	1
	13.2.2 - Implement and Manage Azure Network Adapter Facts	Assignment	1
	13.2.3 - Implement and Manage Azure Extended Network Facts	Assignment	1
	13.2.4 - Practice Questions	Assignment	10
	13.3.1 - NPS Overview	Assignment	1
	13.3.10 - RADIUS Facts	Assignment	1
	13.3.11 - RADIUS Configuration Facts	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	13.3.12 - Configure a RADIUS Solution	Assignment	5
	13.3.13 - Practice Questions	Assignment	10
	13.3.2 - Install NPS	Assignment	1
	13.3.3 - NPS Installation Facts	Assignment	1
	13.3.4 - NPS Network Policies	Assignment	1
	13.3.5 - Configure Network Policies for VPN, Wireless, and Wired Clients	Assignment	1
	13.3.6 - NPS Network Policy Facts	Assignment	1
	13.3.7 - Configure a RADIUS Client	Assignment	1
	13.3.8 - Configure a RADIUS Proxy	Assignment	1
	13.3.9 - Configure NPS Certificates	Assignment	1
	13.4.1 - Web Application Proxy (WAP) Concepts	Assignment	1
	13.4.2 - Installing ADFS	Assignment	1
	13.4.3 - Install and Configure WAP	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	13.4.4 - Configure WAP Publishing	Assignment	1
	13.4.5 - Web Application Proxy (WAP) Facts	Assignment	1
	13.4.6 - Web Application Proxy (WAP) Publishing Facts	Assignment	1
	13.4.7 - Practice Questions	Assignment	10
	13.5.1 - VPN Concepts	Assignment	1
	13.5.10 - Remote Desktop Gateway	Assignment	1
	13.5.11 - Remote Desktop Gateway Facts	Assignment	1
	13.5.12 - Configure a VPN Server	Assignment	4
	13.5.13 - Implement Azure Relay Facts	Assignment	1
	13.5.14 - Practice Questions	Assignment	10
	13.5.2 - Installing a VPN Server	Assignment	1
	13.5.3 - Configure VPN Reconnect	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	13.5.4 - Remote Access Service (RAS) Gateway Facts	Assignment	1
	13.5.5 - VPN Installation Facts	Assignment	1
	13.5.6 - Site-to-Site VPN Overview	Assignment	1
	13.5.7 - Implementing Site-to-Site VPN	Assignment	1
	13.5.8 - Creating a Site-to-Site VPN Between Azure and the On Premises Network	Assignment	1
	13.5.9 - VPN Facts	Assignment	1
	13.6.1 - Implement Azure Virtual WAN	Assignment	1
	13.6.2 - Add a Site-to-Site VPN to an Azure Virtual WAN	Assignment	1
	13.6.3 - Implement Azure Virtual WAN Facts	Assignment	1
	13.6.4 - Practice Questions	Assignment	10
	13.7.1 - Implement Azure Ad Application Proxy	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	13.7.2 - Implement Azure Ad Application Proxy Facts	Assignment	1
	13.7.3 - Practice Questions	Assignment	10
	2.1.1 - Windows Server	Assignment	1
	2.1.2 - Windows Server Facts	Assignment	1
	2.1.3 - Windows Server Installation	Assignment	1
	2.1.4 - Install Windows Server	Assignment	1
	2.1.5 - Configure Windows Server	Assignment	1
	2.1.6 - Server Installation Facts	Assignment	1
	2.1.7 - Practice Questions	Assignment	10
	2.2.1 - Windows Server Roles and Features	Assignment	1
	2.2.2 - Install Server Roles and Features	Assignment	1
	2.2.3 - Manage Server Roles and Features	Assignment	1
	2.2.4 - Server Roles and Features Facts	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	2.2.5 - Install and Configure the File Server Role	Assignment	2
	2.2.6 - Practice Questions	Assignment	10
	2.3.1 - PowerShell Overview	Assignment	1
	2.3.2 - Use PowerShell	Assignment	1
	2.3.3 - Use PowerShell Continued	Assignment	1
	2.3.4 - PowerShell Facts	Assignment	1
	2.3.5 - Practice Questions	Assignment	10
	2.4.1 - Windows Server Core	Assignment	1
	2.4.2 - Install a Windows Server Core	Assignment	1
	2.4.3 - Windows Server Core Facts	Assignment	1
	2.4.4 - Configure a Server Core Installation	Assignment	1
	2.4.5 - Manage Windows Server Core with PowerShell	Assignment	1
	2.4.6 - Server Core Management Facts	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	2.4.7 - Practice Questions	Assignment	10
	2.5.1 - Windows Server Configuration and Management	Assignment	1
	2.5.2 - Use Server Manager	Assignment	1
	2.5.3 - Windows Server Configuration and Management Facts	Assignment	1
	2.5.4 - Practice Questions	Assignment	10
	2.6.1 - Server Monitor	Assignment	1
	2.6.2 - Use Task Manager	Assignment	1
	2.6.3 - Monitor Performance	Assignment	1
	2.6.4 - Configure Data Collector Sets	Assignment	1
	2.6.5 - Use Resource Monitor	Assignment	1
	2.6.6 - Performance Monitor Facts	Assignment	1
	2.6.7 - Practice Questions	Assignment	10
	2.7.1 - Remote Management	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	2.7.2 - Use Remote Desktop	Assignment	1
	2.7.3 - Allow Remote Desktop Connections	Assignment	3
	2.7.4 - Remote Management Facts	Assignment	1
	2.7.5 - Practice Questions	Assignment	10
	3.1.1 - Cloud Services	Assignment	1
	3.1.2 - Cloud Models	Assignment	1
	3.1.3 - Cloud Concept Facts	Assignment	1
	3.1.4 - Practice Questions	Assignment	10
	3.2.1 - Architectural Components of Azure	Assignment	1
	3.2.10 - Azure Security and Features Facts	Assignment	1
	3.2.11 - Create Azure Account	Assignment	1
	3.2.12 - Use Azure Portal	Assignment	1
	3.2.13 - Create and Configure Azure AD Managed Domain	Assignment	1
	3.2.14 - Practice Questions	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
	3.2.2 - Architectural Components of Azure Facts	Assignment	1
	3.2.3 - Azure Core Products	Assignment	1
	3.2.4 - Azure Core Products	Assignment	1
	3.2.5 - Azure Solutions	Assignment	1
	3.2.6 - Azure Solutions Facts	Assignment	1
	3.2.7 - Azure Privacy, Compliance, and Data Protection	Assignment	1
	3.2.8 - Azure Privacy, Compliance, and Data Protection Facts	Assignment	1
	3.2.9 - Azure Security and Features	Assignment	1
	4.1.1 - Numbering Systems	Assignment	1
	4.1.10 - Configure IP Settings on Workstation	Assignment	1
	4.1.11 - Configure IP Addresses	Assignment	3
	4.1.12 - Practice Questions	Assignment	10
	4.1.2 - Numbering System Facts	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	4.1.3 - IP Addresses	Assignment	1
	4.1.4 - IP Address Facts	Assignment	1
	4.1.5 - Subnets Part 1	Assignment	1
	4.1.6 - Subnets Part 2	Assignment	1
	4.1.7 - Subnet Facts	Assignment	1
	4.1.8 - IP Address Assignment	Assignment	1
	4.1.9 - IP Address Assignment Facts	Assignment	1
	4.2.1 - IP Configuration Troubleshooting	Assignment	1
	4.2.2 - Use ipconfig	Assignment	1
	4.2.3 - IP Configuration Troubleshooting Facts	Assignment	1
	4.2.4 - Explore IP Configuration	Assignment	8
	4.2.5 - Troubleshoot IP Configuration 1	Assignment	8
	4.2.6 - Troubleshoot IP Configuration 2	Assignment	7
	4.2.7 - Troubleshoot IP Configuration 3	Assignment	7
	4.2.8 - Practice Questions	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
	4.3.1 - Network Communication Troubleshooting	Assignment	1
	4.3.2 - Use ping and tracert	Assignment	1
	4.3.3 - Network Communication Troubleshooting Facts	Assignment	1
	4.3.4 - Explore Network Communications	Assignment	1
	4.3.5 - Practice Questions	Assignment	10
	4.4.1 - DHCP	Assignment	1
	4.4.2 - DHCP Facts	Assignment	1
	4.4.3 - Configure a DHCP Server	Assignment	1
	9.3.2 - Manage Windows Servers by Using Azure Arc	Assignment	1
	9.3.3 - Use Azure VM Extensions	Assignment	1
	9.3.4 - Manage Windows Servers by Using Azure Arc Facts	Assignment	1
	9.3.5 - Manage Windows Servers by Using Azure Arc	Assignment	4

Due Date	Assignment Name	Assignment Type	Points
	9.3.6 - Practice Questions	Assignment	10
	9.4.1 - Azure Automation	Assignment	1
	9.4.10 - Practice Questions	Assignment	10
	9.4.2 - Manage Updates for Windows Machines	Assignment	1
	9.4.3 - Manage IaaS Virtual Machines (VMs) in Azure That Run Windows Server	Assignment	1
	9.4.4 - Implement Azure Automation for Hybrid Workloads	Assignment	1
	9.4.5 - Create Runbooks to Automate Tasks on Target VMs (Part 1)	Assignment	1
	9.4.6 - Create Runbooks to Automate Tasks on Target VMs (Part 2)	Assignment	1
	9.4.7 - Implement DSC to Prevent Configuration Drift in IaaS Machines	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	9.4.8 - Manage IaaS Virtual Machines (VMs) in Azure That Run Windows Server	Assignment	4
	9.4.9 - Azure Automations Facts	Assignment	1
	9.5.1 - Azure Monitor	Assignment	1
	9.5.2 - Integrate Windows Servers with Log Analytics	Assignment	1
	9.5.3 - Azure Monitor Facts	Assignment	1
	9.5.4 - Practice Questions	Assignment	10
	9.6.1 - Azure Security Center	Assignment	1
	9.6.2 - Use Azure Security Center	Assignment	1
	9.6.3 - Azure Security Center Facts	Assignment	1
	A.1.1 - Pro Exam Objectives	Assignment	1
	A.1.2 - Pro Exam Objectives by Course Section	Assignment	1
	A.1.3 - How to take the Pro Exam	Assignment	1
	A.1.4 - Pro Exam FAQs	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	A.2.1 - Pro Domain 1: Active Directory Domain Services	Assignment	34
	A.2.2 - Pro Domain 2: Windows Server File and Storage Services	Assignment	21
	A.2.3 - Pro Domain 3: Virtualization	Assignment	9
	A.2.4 - Pro Domain 4: Networking Services	Assignment	37
	A.3 - TestOut Hybrid Server Pro: Core Certification Practice Exam	Assignment	14
	Final Exam TestOut Hybrid Server Pro: Core	Assignment	200
	Introduce Yourself	Discussion	0

Grading Scale

Grading: 75% of your grade will be for the module Exams and labs. 25% of your grade is based on the score on the mid-term and final. You must complete the course feedback to get the LPIC discount coupon to take the LPIC Exam. You do not need to take the LPIC exam for this course. Read about LPIC here: <https://www.lpi.org/our-certifications/summary-of-certifications>

All courses in the Computer Science department will use the following grade scale:

Grading Scheme

A	94-100	B+	87-89.99	C+	77-79.99	D+	67-69.99	E	0-59.99
A-	90-93.99	B	84-86.99	C	74-76.99	D	64-66.99		
		B-	80-83.99	C-	70-73.99	D-	60-63.99		

Academic Integrity

Academic dishonesty: Academic dishonesty, including cheating, plagiarism, misrepresentation or collaboration, will not be tolerated in the CSIS department.

How to Navigate to Canvas

Online Tutoring

Students at SLCC have access to online tutoring through Canvas. From your Canvas course click Online Tutoring in the course navigation and follow the steps to set up an appointment. If this is your first time using the Online Tutoring we recommend you click "Take a Tour" to familiarize yourself with the service.

Note that students only receive 480 minutes of tutoring time each semester. After that we encourage you to use the resources found through this link:

<https://www.slcc.edu/tutoring/index.aspx>

If you have any additional questions reach out to elarningsupport@slcc.edu.

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements.

By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)