



North Central State College

MASTER SYLLABUS

2025-2026

- A. Academic Division: Engineering Technology, Business & Criminal Justice Division
- B. Discipline: Information Technology - Networking
- C. Course Number and Title: ITEC2670 – Administering Windows Server
- D. Assistant Dean: Brooke Miller, M.B.A.
- E. Credit Hours: 3
Lecture: 2 hours
Laboratory: 2 hours
- F. Prerequisites: ITEC2610 (minimum grade of C- required)
- G. Last Course/Curriculum Revision Date: Fall 2025 Origin date: 01/17/2014
- H. Textbook(s) Title:
TestOut Hybrid Server Pro
 - Author: Testout
 - ISBN: 9781935080855
- I. Workbook(s) and/or Lab Manual:
- J. Course Description: This course provides students with the knowledge and skills necessary to administer Windows servers in an enterprise environment. Successful completion of this course validates the student's ability to implement and administer a Windows Server infrastructure. This course prepares students for Microsoft's 70-742 certification exam: Identity with Windows Server 2016
- K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Install and configure Active Directory Domain Services (AD DS)	Weeks 1-4 tests, labs, midterm/final exam
2. Create and manage Active Directory users, computers, groups, and organizational units (OUs)	Weeks 1-4 tests, labs, midterm/final exam
3. Configure Active Directory in a complex enterprise	Weeks 5-7 tests, labs, midterm/final exam
4. Create and manage Group Policy objects (GPOs)	Weeks 8-11 tests, labs, final exam
5. Configure Group Policy processing	Weeks 8-11 tests, labs, final exam
6. Configure Group Policy settings	Weeks 8-11 tests, labs, final exam
7. Install and configure Active Directory Certificate Services (AD CS)	Weeks 12-13 tests, labs, final exam
8. Install and configure Identity Federation and Access solutions	Weeks 14-15 tests, labs, final exam

M. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70–72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63–66	D	1.00	Below Average
60–62	D-	0.67	Poor
00–59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

Important information regarding College Procedures and Policies can be found on the syllabus supplement located at

<https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/14-081b.pdf>



North Central State College

SYLLABUS ADDENDUM

Academic Division:	Engineering Technology, Business & Criminal Justice Division	Discipline:	Information Technology
Course Coordinator:	Daniel Foss		
Course Number:	ITEC-2670-910	Course Title:	Administration Windows Server Advanced
Semester / Session:	Spring 2026	Start / End Date:	1/12/2026 - 5/8/2026

Instructor Information

Name:	Daniel Foss	Credentials:	M.Ed., Curriculum and Instruction – Computer B.S., Education
Phone Number:	419-755-4728	E-Mail Address:	dfoss@ncstatecollege.edu
Office Location:	Kehoe Room 139	Office Hours:	By appointment: Mondays 3:00 PM – 4:30 PM Tuesdays, 8:00 AM -11:30 AM Other times via Zoom: https://tinyurl.com/ITEC-Office-Hours

I. Topical Timeline / Course Calendar (Subject to Change – refer to Canvas for schedule):

Advanced Server Course Schedule – Spring 2026

Week	Modules Covered	Assignments	Due Date (Friday)
1	Week 1	Presentation: 1.0 Enterprise Server Architecture; Advanced Windows/Azure integration labs; Practice questions; Chapter 1 Lab; Quiz – Enterprise Server Models	16-Jan-26
2	Week 2	Presentation: 2.0 Advanced Hyper-V; Nested virtualization; Shielded VMs; Storage QoS; Chapter 2 Lab; Quiz – Hyper-V Security; Quiz – VM Resource Management	23-Jan-26
3	Week 3	Presentation: 3.0 Azure Hybrid Identity; ADFS; Conditional Access; Federation labs; Chapter 3 Lab; Quiz – Hybrid Identity; Quiz – Federation Services	30-Jan-26
4	Week 4	Presentation: 4.0 Advanced Networking; SDN; Network Controller; VXLAN; Chapter 4 Lab; Quiz – SDN Architecture; Quiz – Network Virtualization	6-Feb-26
5	Week 5	Presentation: 5.0 DNS Advanced Operations; DNS policies; split-brain DNS; DNSSEC deep dive; Chapter 5 Lab; Quiz – DNS Policies; Quiz – DNSSEC Advanced	13-Feb-26
6	Week 6	Presentation: 6.0 Active Directory Hardening; Tiered admin model; LAPS; privileged access workstations; Chapter 6 Lab; Quiz – AD Security Architecture	20-Feb-26
7	Week 7	Presentation: 7.0 Group Policy Advanced; GPO filtering; WMI filters; security baselines; AppLocker advanced; Chapter 7 Lab; Quiz – GPO Security & Hardening	27-Feb-26
8	Week 8	Presentation: 8.0 Advanced File Services; BranchCache; FSRM automation; data deduplication; Chapter 8 Lab; Quiz – FSRM; Quiz – BranchCache	6-Mar-26
	Spring Break		13-Mar-26
9	Week 9	Presentation: 9.0 Hybrid Server Management; Azure Arc advanced; Desired State Configuration (DSC); Chapter 9 Lab; Quiz – DSC; Quiz – Azure Arc Automation	20-Mar-26
10	Week 10	Presentation: 10.0 Storage Spaces Direct (S2D); cluster creation; fault domains; performance tuning; Chapter 10 Lab; Quiz – S2D Architecture	27-Mar-26
11	Week 11	Presentation: 11.0 Failover Clustering Advanced; cluster sets; rolling upgrades; quorum tuning; Chapter 11 Lab; Quiz – Failover Clustering Advanced	3-Apr-26
12	Week 12	Presentation: 12.0 Containers & Kubernetes on Windows; container networking; hybrid orchestration; Chapter 12 Lab; Quiz – Windows Containers; Quiz – K8s Hybrid	10-Apr-26
13	Week 13	Presentation: 13.0 Remote Access Advanced; Always On VPN; RADIUS advanced; NPS policies; Chapter 13 Lab; Quiz – AOVN; Quiz – RADIUS/NPS	17-Apr-26
14	Week 14	Practice Final Exam – Part A (Advanced Server Certification); Practice Final Exam – Part B	24-Apr-26
15	Week 15	Windows Server Hybrid Administrator Associate Exam, Microsoft AZ-801 Practice Exam	1-May-26
16	Finals Week	Final Exam	4-May-26

II. Grading and Testing Guidelines:

Category	Count	Points	Weight
Labs	85	850	40%
Quizzes	65	650	30%
Exams	10	500	30%

Grading scale is the college grading scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
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77–79	C+	2.33	Average
73–76	C	2.00	Average
70–72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63–66	D	1.00	Below Average
60–62	D-	0.67	Poor
00–59	F	0.00	Failure

III. Examination Policy:

- All exams must be submitted through the Hybrid Server Advanced (HSA)/CompTIA LMS and/or Canvas.
- You may reference the online curriculum, official HSC /CompTIA documentation, and other reputable sources.
- Collaboration on exams is not permitted unless explicitly authorized.
- AI tools (e.g., Copilot, ChatGPT) are not allowed during quizzes or exams.
- Free Tutoring Service is available: <https://ncstatecollege.edu/student-services/tutoring/>

Assignment Policy:

- All assignments must be completed using the HSC /CompTIA LMS and/or Canvas.
- AI Tools like Copilot and ChatGPT may be used for feedback or clarification, but final submissions must reflect your own independent work.
- Use of the online curriculum for reference is encouraged.
- You may consult documentation, tutorials, and forums for guidance.
- Download, complete, and upload your own work. All submitted project files must be your own original work.
- Plagiarism or submission of work not your own is a serious offense and may result in course failure.
- If you need assistance with the course assignments, contact the Tutoring Department or the Instructor. Tutoring Information (free) can be found at: <https://ncstatecollege.edu/student-services/tutoring/>

IV. Course Attendance and Late Assignment Policy:

- Class attendance is recorded by completion of weekly assignments and activities.
- Assignments are due before midnight every Friday.
- Early submissions are encouraged.
- Except for the final project, all assignments are allowed to be submitted late.
- Each assignment builds on previous work, do not skip assignments. If it is late, submit as soon as possible.
- If you anticipate missing a deadline, contact the instructor in advance to discuss possible accommodation.
- Excused absences include:
 - a. Hospitalization
 - b. Death in the family
 - c. Personal illness or illness in immediate family
 - d. Military leave
 - e. Travel for employment

V. Course Expectations:

- All students are expected to demonstrate professional behavior and use language appropriate for the learning experience, both written and orally.
- For online classes, students are required to have access to an internet connection and a laptop or desktop computer. Chromebooks are not adequate for this course.
- MacBooks are acceptable, however, there may be some assignments that can only be completed on a Windows computer.
- The college provides free computer labs - <https://ncstatecollege.edu/student-services/computer-labs/> and loaner laptops - <https://ncstatecollege.edu/advocacy-and-resources/> - select Technology Resources