Northwest Arkansas Community College
Business and Computer Information Systems Division

Discipline Code
NTWK

Course Number
2023

Course Title
Network Administration - Windows

Catalog Description
This course provides students with computer network administrative techniques in a currently popular Windows network operating system. Students will install local area network software. Attention is given to the common tasks of daily administration of a local area network, such as creating user accounts, assignment of user accounts to groups, administration of file and folder permissions, user rights, system performance monitoring, and other routine administrative tasks. Outside lab time will be required.

Prerequisites
NTWK 2014-Networking and Information Systems

Credit Hours
3 credit hours

Contact hours
45 lecture/lab contact hours

Load hours
3 load hours

Semesters Offered
Fall, On Demand

ACTS Equivalent
N/A

Grade Mode
A-F

Learning Outcomes

Students will:

- Configure Active Directory and Domain Name Service
- Use Active Directory to
    1. Manage Organizational Units
    2. Manage Users/Group/Computer Accounts
    3. Manage Group Policies
    4. Maintain AD and Domain Controllers
    5. Implement Certificate Services
- Configure local and group policies
- Install and manage hardware resources including appropriate device drivers, patches and updates
- Manage data storage and file systems
- Administer and manage group policy
- Monitor Network Performance
- Perform backups and system recovery
- Identify basic security best practices in Windows Server
- Install, Configure, Operate and Maintain a Windows Server

General Education Outcomes Supported

Students can use computers proficiently.

Standard Practices

Topics list

- Operating system installation and management
- Active Directory
- Domain Controller
- Organizational Units
- AD Sites
- Server Roles
- User and Group account creation and management
- Local and group policy creation and management
- Authentication methods
- Updates and patches
- Access controls
- Logging and auditing
- System performance and management
- Virtualization
- Backup and Restoring Data
- File systems configuration and security
- Network configuration
- PowerShell and command line interfaces

- TCP/IP
- DNS and DNSSEC
- DHCP
- Certificates
- Security best practices for hardening Windows server installations

Learning activities

A virtual environment for activities, assignments and projects utilizing a Windows network environment.
- This course requires some in class, hands-on work and also additional hands-on work in a virtual or on-campus computer lab.

Assessments

- Homework
- Lab assignments
- Hands-On activities
- Quizzes
- Projects
- Exams

Grading Guidelines

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = 59 & below

Revision Date

May 20, 2020