

# NETWORKING/2 (180 Hours)

Course No.: 77-65-60

## COMPETENCY CHECKLIST

Student Name \_\_\_\_\_

Teacher Name \_\_\_\_\_ School Site \_\_\_\_\_

Start Date \_\_\_\_\_ Completion Date \_\_\_\_\_ Certificate Date \_\_\_\_\_

Teacher Signature \_\_\_\_\_ Student Signature \_\_\_\_\_

(Signatures verify completion of course competencies)

### A. INTRODUCTION AND SAFETY (5 hrs)

- \_\_\_\_\_ 1. Scope and purpose of class
- \_\_\_\_\_ 2. Course content as part of Linked Learning
- \_\_\_\_\_ 3. Classroom policies and procedures
- \_\_\_\_\_ 4. Class/work first aid/emergency
- \_\_\_\_\_ 5. Jobs w/impact on networking technicians
- \_\_\_\_\_ 6. Promoting gender equity/non-traditional
- \_\_\_\_\_ 7. Impact of EPA on networking industry
- \_\_\_\_\_ 8. Proper removal of hazardous materials
- \_\_\_\_\_ 9. Use of MSDS as it applies to industry
- \_\_\_\_\_ 10. Purpose of Cal/OSHA and its laws
- \_\_\_\_\_ 11. Maintaining a safe work place
- \_\_\_\_\_ 12. Pass safety test with 100% accuracy

### B. SETTING UP USER ACCOUNTS AND LOGIN SECURITY (10 hrs)

- \_\_\_\_\_ 1. User object and its property value
- \_\_\_\_\_ 2. Create a user object
- \_\_\_\_\_ 3. Modify user objects w/template object
- \_\_\_\_\_ 4. Create user home directories
- \_\_\_\_\_ 5. Parameters for multiple users
- \_\_\_\_\_ 6. Managing objects
- \_\_\_\_\_ 7. Create users
- \_\_\_\_\_ 8. List levels /functions of network security
- \_\_\_\_\_ 9. Describe/establish login security
- \_\_\_\_\_ 10. Pass exam on users on a network

### C. SETTING UP THE NETWORK FILE SYSTEM (15 hrs)

- \_\_\_\_\_ 1. Compare hierarchy of file structures
- \_\_\_\_\_ 2. Division of disk storage space for network
- \_\_\_\_\_ 3. Define partition and volume
- \_\_\_\_\_ 4. Compare the use of FDISK
- \_\_\_\_\_ 5. Describe the use of Diskpart
- \_\_\_\_\_ 6. How to logically link/extend locations

- \_\_\_\_\_ 7. Accessing file system on 1 or across servers
- \_\_\_\_\_ 8. Physical vs. logical resources
- \_\_\_\_\_ 9. Planning/creating custom volumes/directories
- \_\_\_\_\_ 10. List system-created volumes/directories
- \_\_\_\_\_ 11. List directories for organizing file system
- \_\_\_\_\_ 12. Strengths/weaknesses of sample directories
- \_\_\_\_\_ 13. Pass exam on network file design/set-up

### D. MANAGING THE FILE SYSTEM (15 hrs)

- \_\_\_\_\_ 1. Windows command prompt utilities
- \_\_\_\_\_ 2. Analyze comparable commands
- \_\_\_\_\_ 3. Compare utilities for networking systems
- \_\_\_\_\_ 4. Complete listed file system tasks
- \_\_\_\_\_ 5. Complete additional listed tasks
- \_\_\_\_\_ 6. Manage volume space
- \_\_\_\_\_ 7. Exam on managing network directories/folders

### E. FILE SYSTEM SECURITY (10 hrs)

- \_\_\_\_\_ 1. Define listed terms related to topic
- \_\_\_\_\_ 2. Describe file system security
- \_\_\_\_\_ 3. Explain directory and file rights
- \_\_\_\_\_ 4. Trustee assignments & inheritance
- \_\_\_\_\_ 5. Security equivalence & effective rights
- \_\_\_\_\_ 6. Planning a directory structure
- \_\_\_\_\_ 7. Describe/set directory and file attributes
- \_\_\_\_\_ 8. Explain user's effective rights
- \_\_\_\_\_ 9. Describe need for security groups
- \_\_\_\_\_ 10. Describe how security groups work
- \_\_\_\_\_ 11. Differences in permissions for security groups
- \_\_\_\_\_ 12. Demo adding/subtracting users from groups
- \_\_\_\_\_ 13. Pass exam on file system security planning

### F. MULTI-VENDOR NETWORKS (10 hrs)

- \_\_\_\_\_ 1. Multi-vendor network environment
- \_\_\_\_\_ 2. How various operating systems connect
- \_\_\_\_\_ 3. Centralized vs. client/server computing

- \_\_\_\_\_ 4. Client/server networking environment
- \_\_\_\_\_ 5. Network operating systems available
- \_\_\_\_\_ 6. Database management system
- \_\_\_\_\_ 7. Pass exam on NOS availability/advantages

**G. NETWORK TRANSMISSION (15 hrs)**

- \_\_\_\_\_ 1. WAN transmission/connection components
- \_\_\_\_\_ 2. Base concepts associated with WANs
- \_\_\_\_\_ 3. Differences between WAN technologies
- \_\_\_\_\_ 4. Advanced WAN technologies
- \_\_\_\_\_ 5. Digital Data Services
- \_\_\_\_\_ 6. Lines available for network transmission
- \_\_\_\_\_ 7. Describe X.25 WAN links
- \_\_\_\_\_ 8. Exam on network transmission options

**H. NETWORK MANAGEMENT (15 hrs)**

- \_\_\_\_\_ 1. Network management/planning
- \_\_\_\_\_ 2. Standards, policies & procedures
- \_\_\_\_\_ 3. Troubleshooting w/structure approach
- \_\_\_\_\_ 4. Troubleshooting equipment
- \_\_\_\_\_ 5. Establishing upgrade guidelines
- \_\_\_\_\_ 6. Prepare listed items and tasks
- \_\_\_\_\_ 7. Establishing a baseline
- \_\_\_\_\_ 8. Use a performance monitor
- \_\_\_\_\_ 9. Use time-domain reflectometer
- \_\_\_\_\_ 10. Use cable tester for listed tasks
- \_\_\_\_\_ 11. Steps for troubleshooting problems
- \_\_\_\_\_ 12. Solve problem scenario
- \_\_\_\_\_ 13. Pass exam on network management

**I. SETTING UP NETWORK PRINTING (10 hrs)**

- \_\_\_\_\_ 1. Basic components of network printing
- \_\_\_\_\_ 2. Network printing in Windows
- \_\_\_\_\_ 3. Demo setting up listed tasks
- \_\_\_\_\_ 4. Setting up/connecting printer thru server
- \_\_\_\_\_ 5. How printing is regulated
- \_\_\_\_\_ 6. Flow of print jobs into/out of print queue
- \_\_\_\_\_ 7. Managing a print queue
- \_\_\_\_\_ 8. How to customize print jobs
- \_\_\_\_\_ 9. Pass exam on setting up a network printer

**J. CREATING LOGIN SCRIPTS (10 hrs)**

- \_\_\_\_\_ 1. Types of login scripts
- \_\_\_\_\_ 2. How login scripts coordinate at login
- \_\_\_\_\_ 3. Procedures to be executed during login
- \_\_\_\_\_ 4. Correct login script command syntax
- \_\_\_\_\_ 5. Create/execute/debug a login script
- \_\_\_\_\_ 6. Exam on steps to create/save login script

**K. CONFIGURING NETWORK APPLICATIONS FOR USERS (10 hrs)**

- \_\_\_\_\_ 1. Manage network applications w/objects
- \_\_\_\_\_ 2. How to launch network applications
- \_\_\_\_\_ 3. Use NAL to launch network from Windows
- \_\_\_\_\_ 4. Exam on managing networked applications

**L. NETWORK FAULT INTOLERANCE (10 hrs)**

- \_\_\_\_\_ 1. Advantages/disadvantages of disk mirroring
- \_\_\_\_\_ 2. Explain/demonstrate disk duplexing
- \_\_\_\_\_ 3. Disk striping with and without parity
- \_\_\_\_\_ 4. Tape back-up and disk volume set creation
- \_\_\_\_\_ 5. Exam on hard disk protection options

**M. THE INTERNET (10 hrs)**

- \_\_\_\_\_ 1. Internet/resources for network administrator
- \_\_\_\_\_ 2. How to access resources on internet
- \_\_\_\_\_ 3. Internet addressing methods
- \_\_\_\_\_ 4. Make and use an internet connection
- \_\_\_\_\_ 5. Explain listed items/terms related to topic
- \_\_\_\_\_ 6. List of employees/addresses from internet

**N. BACKING UP SERVERS & WORKSTATIONS (10 hrs)**

- \_\_\_\_\_ 1. Compare/contrast backup strategies
- \_\_\_\_\_ 2. Process of backing up a server
- \_\_\_\_\_ 3. Process to backup work station file systems
- \_\_\_\_\_ 4. Restoring file system information
- \_\_\_\_\_ 5. Exam identifying backup strategies/options

**O. PERFORMING A SIMPLE NETWORK INSTALLATION (5 hrs)**

- \_\_\_\_\_ 1. Simple vs. Custom installation options
- \_\_\_\_\_ 2. Major steps for installing network software
- \_\_\_\_\_ 3. Perform server installation w/Simple option

**P. NETWORK TEST REVIEW SESSIONS WITH STUDY GUIDES AND SIMULATED ONLINE TESTING (5 hrs)**

- \_\_\_\_\_ 1. Review test from study guides w/instructor
- \_\_\_\_\_ 2. Evaluate results/prepare for re-testing
- \_\_\_\_\_ 3. Time management skills/note taking
- \_\_\_\_\_ 4. Take simulated test on-line
- \_\_\_\_\_ 5. Prepare for Network test w/lab reviews

**Q. EMPLOYABILITY SKILLS REVIEW (5 hrs)**

- \_\_\_\_\_ 1. Employer requirements for employees
- \_\_\_\_\_ 2. Review list of potential employers
- \_\_\_\_\_ 3. Role of social networking in job search
- \_\_\_\_\_ 4. Finalize sample resumes/cover letters
- \_\_\_\_\_ 5. Importance of legible job application
- \_\_\_\_\_ 6. Complete sample job applications
- \_\_\_\_\_ 7. Importance of enthusiasm on job
- \_\_\_\_\_ 8. Appropriate appearance on the job
- \_\_\_\_\_ 9. Continuous upgrading of job skills
- \_\_\_\_\_ 10. Customer service to build business

- \_\_\_ 11. Demo appropriate interview techniques
- \_\_\_ 12. Materials for successful interview
- \_\_\_ 13. Finalize sample follow-up letters
- \_\_\_ 14. Review/demo appropriate follow-up

**R. ENTREPRENEURIAL SKILLS (5 hrs)**

- \_\_\_ 1. Define entrepreneurship
- \_\_\_ 2. Characteristics of successful entrepreneur
- \_\_\_ 3. Entrepreneurs in networking field
- \_\_\_ 4. Purpose/components of business plan
- \_\_\_ 5. Examine personal goals prior to beginning
- \_\_\_ 6. Sources of monetary investment
- \_\_\_ 7. Licensing needs in networking business
- \_\_\_ 8. Scenario w/student as business owner