BAKER COLLEGE
STUDENT LEARNING OUTCOMES

MNP 2010 Windows Configuration
3 Semester Hours

Student Learning Outcomes & Enabling Objectives

1. Install and upgrade to Windows 10
   a. Evaluate Hardware Readiness and Capability including Windows 10 overview, system requirements, and installation options and identifying upgrade paths.
   b. Configure and prepare the environment for Installing Windows 10 including reviewing the Windows 10 Boot Environment, determining and creating appropriate installation media, performing a clean installation and evaluating the requirements to upgrade to Windows 10.

2. Configure hardware and applications.
   a. Configure devices and device drivers. This objective includes Install, update, disable, and roll back drivers; resolve driver issues and configure driver settings, Install and configure desktop applications including configuring default program settings, modifying file associations, installing and repairing applications by using Windows Installer and set compatibility mode.
   b. Perform post-installation configuration. Configure and customize start menu, desktop, taskbar, and notification settings, according to device type; configure accessibility options; configure Cortana; configure Microsoft Edge; configure Internet Explorer; configure Hyper-V; configure power settings.

3. Configure network connectivity.
   a. Implement Windows in an Enterprise environment. Provision with the Windows Imaging and Configuration Designer (ICD) tool; implement Active Directory–based activation; implement volume activation using a Key Management Service (KMS); query and configure activation states using the command line; configure Active Directory, including Group Policies; configure and optimize user account control (UAC).Configure and maintain network security including configuring Windows Firewall, configuring Windows Firewall with Advanced Security, configuring connection security rules (IPsec), configuring network discovery, configuring authenticated exceptions and managing wireless security.
   b. Configure and support IPv4 and IPv6 network settings; configure name resolution; connect to a network; configure network locations; configure Windows Firewall; configure Windows Firewall with Advanced Security; configure network discovery; configure Wi-Fi settings; configure Wi- Fi Direct; troubleshoot network issues; configure VPN, such as app- triggered VPN, traffic filters, and lockdown VPN; configure IPsec.

4. Configure storage, data access and usage.
   a. Configure storage including disks, volumes, and file system options using Disk Management and Windows PowerShell; create and configure VHDs; configure removable devices; create and configure storage spaces; troubleshoot storage and removable devices issues. Configure

file and folder access including configuring NTFS permissions, encrypting files and folders using EFS, configuring disk quotas and configuring object access auditing.
   b. Configure data access and usage including configure file and printer sharing and HomeGroup connections; configure folder shares, public folders, and OneDrive; configure file system permissions; configure OneDrive usage; troubleshoot data access and usage.

5. Configure implementation of apps and remote access
   a. Implement apps including configuring desktop apps; configure startup options; configure Windows features; configure Windows Store; implement Windows Store apps; implement Windows Store for Business; provision packages; create packages; use deployment tools; use the Windows Assessment and Deployment Kit (ADK)
   b. Configure remote management including choosing the appropriate remote management tools; configure remote management settings; modify settings remotely by using the Microsoft Management Console (MMC) or Windows PowerShell; configure Remote Assistance, including Easy Connect; configure Remote Desktop; configure remote PowerShell.

6. Configure updates and monitoring Windows.
   a. Configure updates including configuring Windows Update options; implement Insider Preview, Current Branch (CB), Current Branch for Business (CBB), and Long- Term Servicing Branch (LTSB) scenarios; manage update history; roll back updates; update Windows Store apps
   b. Monitor Windows including configuring and analyzing Event Viewer logs; configure event subscriptions; monitor performance using Task Manager; monitor performance using Resource Monitor; monitor performance using Performance Monitor and Data Collector Sets; monitor system resources; configure indexing options; manage client security by using Windows Defender; evaluate system stability using Reliability Monitor; troubleshoot performance issues

7. Configure system and data recovery options and authorization and authentication options.
   a. Configure system and data recovery including configuring a recovery drive; configuring a system restore; perform a refresh or recycle; configure restore points; restore previous versions of files and folders; configure File History; recover files from OneDrive; use Windows Backup and Restore; perform a backup and restore with WBAdmin; perform recovery operations using Windows Recovery.
   b. Configure authorization and authentication including configuring Microsoft Passport; configure picture passwords and biometrics; configure workgroups; configure domain settings; configure Credential Manager; configure local accounts; configure Microsoft accounts; configure Device Registration; configure Windows Hello; configure Device Guard; configure Credential Guard; configure Device Health Attestation.

8. Configure advanced management tools
   a. Configure advanced management tools including configuring services; configure Task Scheduler; configure automation of management tasks using Windows PowerShell.