**NETWORKING ESSENTIALS COURSE SCHEDULE**

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| --- | --- | --- | --- |
| **DAY** | **LESSON** | **LAB** | **NOTE** |
|  | **Introduction**  **Chapter 01. Networking fundamentals**   * Exploring function of networking * Securing the network |  |  |
| **Chapter 02. OSI and TCP/IP models**   * Understanding the Host-to-Host Communications Model * Understanding the TCP/IP transport layer |  |  |
|  | **Chapter 03. Ethernet and Switch LAN technology**   * Understanding Ethernet * Understanding the challenges with Switched LAN Technology * Exploring the packet Delivery Process 1 (layer 1) * Exploring the packet Delivery Process 2 (layer 2) * Exploring the packet Delivery Process 3 (layer 3) | IP address |  |
| **Chapter 04. Cabling LAN**   * Connecting to an Ethernet LAN * Cabling the LAN |  |
| **Chapter 05. IP addressing**   * Understanding the TCP/IP Internet Layer * Understanding Binary Basic * Constructing a Network Address Scheme |  |
|  | **Chapter 05. IP Addressing (cont)**   * IP Subnetting | IP Subnetting |  |
| **Chapter 05. IP Addressing (cont)**   * VLSM | VLSM |  |
| **Review: IP addressing (exercises)** |  |  |
| **Chapter 06. Wireless**   * Exploring Wireless Networking * Understanding WLAN Security |  |  |
|  | **Chapter 07. Windows Servers**   * Introductions * Active Directory * ….. |  |  |
|  | * Lab: Domain Controllers | * Upgrade to DC * Users, Groups, OUs * …. |  |
|  | **Chapter 08. Network Services**   * **Routing and Remote Access** * **DHCP** * **DNS** * **FTP** |  |  |
|  | * Lab | * **Routing and Remote Access** * **DHCP** * **DNS** * **FTP** |  |
|  | Test |  |  |
|  | **Chapter 08. Network Services (cont)**   * HTTP * VPN |  |  |
|  | * Lab | * HTTP * VPN remote access * VPN site-to-site |  |
|  | **Chapter 9. Linux**   * Introduction to * CLI * Installing software with rpm, yum * … |  |  |
|  | **Lab** |  |  |
|  | **Chapter 10. Linux (cont - services)**   * Samba * FTP * DHCP |  |  |
|  | **Lab** | * Samba * FTP * DHCP |  |
|  | Review |  |  |