

Week# (Date)	Lecture	Lab Assignments
week1 Jan22	Vol 1 Part I: Intro to Networking CCNAv1 Chapter 1: Intro to TCP/IP Networking CCNAv1 Chapter 2: Fundamentals of Ethernet LANS Sybex Chapter 1: Internetworking Sybex Chapter 2: Ethernet Networking & Data Encapsulation Sybex Chapter 3: Introduction to TCP/IP	Enroll into Cisco Network Academy, view Introduction to Packet Tracer course, and download Packet Tracer at https://www.netacad.com/courses/packet-tracer or https://www.netacad.com/courses/packet-tracer/introduction-packet-tracer
week2 Jan29	CCNAv1 Chapter 3: Fundamentals of WANs and IP Routing Vol 1 Part II: Implementing Ethernet LANS CCNAv1 Chapter 4: Using Command-Line Interface Sybex Chapter 6: Cisco Internetworking Operating System Sybex Chapter 10: Layer 2 Switching	Lab1: Cisco Packet Tracer Introduction
week 3 Feb5	CCNAv1 Chapter 5: Analyzing Ethernet LAN Switching CCNAv1 Chapter 6: Configuring Basic Switch Management Sybex Chapter 7: Managing a Cisco Internetwork Sybex Chapter 8: Cisco IOS	Lab2: Physical and Logical Network Topology
week 4 Feb12	CCNAv1 Chapter 7: Configuring and Verifying Switch Interfaces Vol 1 Part III: Implementing VLANs and STP CCNAv1 Chapter 8: Implementing Ethernet Virtual LANs Sybex Chapter 11: Virtual LANs and Inter-Vlan Routing Sybex Chapter 15: Enhanced Switching	Lab3: Layer 2 Switching & Trunking
week 5 Feb19	CCNAv1 Chapter 9: Spanning Tree Protocol Concepts CCNAv1 Chapter 10: RSTP and EtherChannel Configuration	Lab4: Spanning-Tree Protocol Lab
week 6 Feb26	Vol 1 Part IV: IPv4 Addressing CCNAv1 Chapter 11: IPv4 Subnetting CCNAv1 Chapter 12: Analyzing Classful IPv4 Networks CCNAv1 Chapter 13: Analyzing Subnet Masks CCNAv1 Chapter 14: Analyzing Existing Subnets Sybex Chapter 4: IP Subnetting Sybex Chapter 5: VLSM, Summarization, troubleshooting TCP/IP X	Lab5: Wireshark Packet Capture and Decode Windows and Unix Network Administration
week 7 Mar5	Vol 1 Part V: IPv4 Routing CCNAv1 Chapter 15: Operating Cisco Routers CCNAv1 Chapter 16: Config IPv4 Address and Static Routes	Lab6: Static Routing Lab
week 8 Mar12	Midterm	

week 9 Mar19	CCNAv1 Chapter 17: IP Routing in the LAN CCNAv1 Chapter 18: Troubleshooting IPv4 Routing Sybex Chapter 9: IP Routing	Lab7: Inter-VLAN Routing using ROAS and SVI
week10 Mar26	Vol 1 Part VI: OSPF CCNAv1 Chapter 19: Understading OSPF Concepts CCNAv1 Chapter 20: Implementing OSPF CCNAv1 Chapter 21: OSPF Network Types and Neighbors Sybex Chapter 18: OSPF Sybex Chapter 19: Multi-Area OSPF X	Lab8: OSPF Lab
week11 Apr2	Spring Break (no class)	
week12 Apr9	Vol 1 Part VII: IP Version 6 CCNAv1 Chapter 22: Fundamentals of IP version 6 CCNAv1 Chapter 23: IPv6 Addressing and Subnetting CCNAv1 Chapter 24: Implementing IPv6 Addressing on Routers CCNAv1 Chapter 25: Implementing IPv6 Routing Sybex Chapter 14 Internet Protocol Version 6 (IPv6) Sybex Chapter 20 Troubleshooting IP, IPv6 & Vlans	Lab9: IPv6 Lab
week13 Apr16	Vol 1 Part VIII: Wireless LANS CCNAv1 Chapter 26: Fundamentals of Wireless Networks CCNAv1 Chapter 27: Analyzing Cisco Wireless Networks CCNAv1 Chapter 28: Securing Wireless Networks CCNAv1 Chapter 29: Building a Wireless LAN	Lab10: Cisco Packet Tracer Wireless Lab
week14 Apr23	Vol 2 Part 1: IP ACL CCNAv2 Chapter 1: Intro to TCP/IP Transport (TCP & UDP) and Applications CCNAv2 Chapter 2: Basic IPv4 ACLs CCNAv2 Chapter 3: Advanced IPv4 ACLs Sybex Chapter 12: Security and ACL	Lab11: Access Control List Lab
week15 Apr 30	Vol 2 Part 3: IP Services CCNAv2 Chapter 9: Device Management Protocols (Syslog, NTP, CDP, LLDP) CCNAv2 Chapter 10: Network Address Translation CCNAv2 Chapter 11: QOS CCNAv2 Chapter 12: Misc (FHRP,SNMP, FTP, TFTP) Sybex Chapter 13: Network Address Translation Sybex Chapter 16: Device Management & Security Sybex Chapter 17: EIGRP X	Lab12: Network Address Translation Lab

week16 May 7	Vol 2 Part 2: Security Services (Secure device, DHCP, Port Security) CCNAv2 Chapter 4: Security Architectures CCNAv2 Chapter 5: Securing Network Devices CCNAv2 Chapter 6: Switch Port Security CCNAv2 Chapter 7: Implementing DHCP CCNAv2 Chapter 8: DHCP Snooping and ARP Inspection	
Skip	Vol 2 Part 4: Network Architecture CCNAv2 Chapter 13: LAN Architecture CCNAv2 Chapter 14: WAN Architecture (Metro Eth, MPLS, Internet VPNs) CCNAv2 Chapter 15: Cloud Architecture Sybex Chapter 21: Wide Area Networking Protocols (no BGP, PPP, PPOE, HDLC, GRE, HSRP, NetFlow) Vol 2 part 5: Network Automation CCNAv2 Chapter 16: Intro to Controller-Based Networks CCNAv2 Chapter 17: Software Defined Access CCNAv2 Chapter 18: REST and JSON CCNAv2 Chapter 19: Ansible, Puppet, and Chef Sybex Chapter 22: Intelligent Networks	Add vpn lab? Wide Area Network LabX Setup a web server in the Amazon AWS cloud and access remotely? Add network automation lab using RESTful API calls via Python?
week17 May14	Final Exam (Wed May 14, 2025 5:00pm ?)	