CIS 151C : CISCO INTERNETWORKING

Transcript title

Cisco Introduction to Networks

Credits

4

Grading mode

Standard letter grades

Total contact hours

50

Lecture hours

30

Other hours

20

Prerequisites

CIS 179 or Comptia Network + certification.

Course Description

2First of a three-course sequence to prepare the student to take the Cisco Certified Network Associate (CCNA) certification exam. The class uses the Cisco Academy online curriculum, CCNA 5.0, Introduction to Networks. Students explore the TCP/IP and Open Systems Interconnect (OSI) models, local area networks (LANs), Ethernet, cabling, topologies, configuring routers and switches, IPv4 and IPv6 addressing, subnetting, network standards and protocols. The lecture/lab environment allows the student the opportunity to practice skills learned throughout the term.

Course learning outcomes

1. Define the OSI model by listing the seven layers in sequential order, providing a definition of encapsulation of data and protocols used at each layer.
2. Explain the difference between routed and routing protocols.
3. Name different routing protocols and describe their fundamental differences.
4. Draw illustrations of different topologies used in LANs, including the different networking device's symbols used for communication within LANs.
5. Illustrate logical locations for intermediate and main distribution closets and appropriate location of jacks given a floor plan of a company/school.
6. Given a Private Class B IP address, borrow bits, determine network numbers and assign IP host addresses to all nodes of a LAN.