

Alexandria Technical and Community College

CVNP 1603: Cisco 1

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 1

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This is the first course in the Cisco Certified Network Associate (CCNA) Routing and Switching curriculum. This introductory course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. This course addresses the principles and structure of Internet Protocol (IP) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for understanding networks. Students will be able to build simple Local Area Networks (LAN), perform basic configurations for routers and switches, and implement IP addressing schemes.

B. COURSE EFFECTIVE DATES: 08/22/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Exploring networking
2. Configuring a Cisco Internetworking Operating System (IOS)
3. Network protocols and communications
4. Network access
5. Ethernet
6. Network layer
7. Transport layer
8. IP Addressing
9. Subnetting IP networks
10. Application layer

D. LEARNING OUTCOMES (General)

1. The learner will demonstrate an understanding of Open Systems Interconnection (OSI) and Transmission Control Protocol/Internet Protocol (TCP/IP) models as they relate to transferring data in the network.
2. The learner will demonstrate an understanding of bridging, switching, and routing as it relates to the TCP/IP networking layers.
3. The learner will demonstrate an understanding of computer network topologies, hardware, and test equipment by creating a network from basic cables, connectors, and switches.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted