

Alexandria Technical and Community College

CVNP 1612: Cisco 2

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 1

OJT Hours/Week: *.*

Prerequisites:

This course requires the following prerequisite

CVNP 1603 - Cisco 1 (Number of Years Valid: 5)

Corequisites: None

MnTC Goals: None

This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Students will be able to configure and troubleshoot routers and switches and resolve common issues with Routing Information Protocol v1 (RIP), RIP next generation (RIPng), single-area and multi-area Open Shortest Path First (OSPF), Virtual Local Area Networks (VLAN), and inter-VLAN routing in both Internet Protocol (IP) v4 and IPv6 networks. Prerequisite: CVNP1603

B. COURSE EFFECTIVE DATES: 08/25/2014 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Introduction to Switched Networks
2. Basic switching concepts and configurations
3. Install and configure VLANs
4. Routing concepts
5. Inter-VLAN routing
6. Routing dynamically
7. Static routing
8. Install and configure OSPF routing
9. Access Control Lists (ACL)
10. Dynamic Host Configuration Protocol (DHCP)
11. Network Address Translation for IPv4

D. LEARNING OUTCOMES (General)

1. The learner will demonstrate an understanding of and ability to describe basic switching concepts and the operation of Cisco switches.
2. The learner will demonstrate an understanding of and ability to describe the purpose, nature, and operations of a router, routing tables, and the route lookup process.
3. The learner will demonstrate an understanding of the configuration and troubleshooting of ACLs for IPv4 and IPv6 networks.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted