

# Alexandria Technical and Community College

## CVNP 2603: Advanced Network Operating System

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 1

OJT Hours/Week: \*.\*

Prerequisites:

This course requires the following prerequisite

CVNP 1620 - Enterprise Operating System I (Number of Years Valid: 5)

Corequisites: None

MnTC Goals: None

This is an advanced course in network operating systems concepts. Students gain experience in working with server-based roles and services to support an enterprise environment. Hands-on activities will include configuring virtual servers for use as Domain Name Service, Dynamic Host Configuration Protocol, IP Address Management, Remote Access, and Distributed File System services. Pre-requisite CVNP 1620.

**B. COURSE EFFECTIVE DATES:** 02/28/2018 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Configuring TCP/IP (Transmission Control Protocol/Internet Protocol)
2. Configuring Domain Naming Service Servers (DNS)
3. Configuring Advanced Domain Naming Service
4. Implementing Dynamic Host Configuration Protocol (DHCP)
5. Implementing IP Address Management (IPAM)
6. Remote Access Configuration
7. Implementing Network Policy Server (NPS)
8. Configuring Distributed File System (DFS) and BranchCache.
9. Implement advanced networking solutions.

### D. LEARNING OUTCOMES (General)

1. The learner will be able to configure servers to communicate in a TCP/IP network environment.
2. The learner will be able to configure networking services to support an organization's TCP/IP environment.
3. The learner will be able to configure Remote Access services in a network environment.
4. The learner will understand how to deploy Distributed File Systems and other advanced networking solutions in an enterprise environment.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted