

Alexandria Technical and Community College

CVNP 2601: Virtual Computing

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 1

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Guide to Supporting Microsoft Private Clouds instructs future network administrators how to effectively implement and maintain Microsoft® private clouds with a balance of conceptual expertise and hands-on skills. This course prepares students to work with large providers, such as Amazon, Microsoft®, and Google, as well as implement smaller scale cloud computing solutions within their own network environments. In addition to learning to install and use the Microsoft's virtualization products, the student learns to apply virtualization technology to set up virtual networks, provide for disaster recovery, create high-availability solutions with clustering, improve security and performance, and use management software to administer multiple virtual machines.

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

C. OUTLINE OF MAJOR CONTENT AREAS

1. Introduction to the Private Cloud
2. Work with virtual machines
3. Install and use the self-service portal
4. Use the Virtual Desktop Infrastructure
5. Implement High Availability
6. Manage High-Availability clusters
7. Manage the Private Cloud with PowerShell
8. Utilize the technology behind virtualization
9. Use Hyper-V
10. Create and manage virtual machines
11. Configure the Hyper-V environment
12. Install and use Virtual Machine Manager (VMM)

D. LEARNING OUTCOMES (General)

1. The learner will exhibit an understanding of the virtual computer environment.
2. The learner will exhibit the support functions of other users (installing, configuring, troubleshooting problems) in a virtual environment, including keeping their own virtual lab computer operating properly in a multi-platform, networked environment.
3. The learner will exhibit the ability to add users and hardware to the existing virtual environments.
4. The learner will demonstrate proficiency in configuring, troubleshooting, and maintaining multiple virtual machines within a virtual 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