Course Title:  **VMware vSphere: Install, Configure, Manage**

**Course Description:**
This hands-on training course explores installation, configuration, and management of VMware vSphere™, which consists of ESX/ESXi and vCenter Server.

VMware training is only available to individuals who may be a student in full or part time education, unemployed, career changers or trying to improve their knowledge and are paying for the training themselves. It is not for companies or corporate entities to obtain training for their employees – those individuals must go to a commercial VMware training offering through a VMware authorized training center.

**Course Prerequisite(s):**
System administration experience on Microsoft Windows or Linux operating

**Course Objectives:**
At the end of the course, you should gain an understanding of the functionality in VMware vSphere and be able to:
- Install and configure ESX or ESXi
- Install and configure vCenter Server components
- Configure and manage ESX/ESXi networking and storage using vCenter Server
- Deploy, manage, and migrate virtual machines
- Manage user access to the VMware infrastructure
- Use vCenter Server to monitor resource usage
- Use vCenter Server to increase scalability
- Use VMware vCenter Update Manager to apply ESX/ESXi patches
- Use vCenter Server to manage higher availability and data protection

**Textbook: (provided)**
VMware vSphere: Install, Configure, Manage [6.0] – English Kit

**Certification Notes:**
Preparation for VCP certification exam.

**Next class possibilities:**
VMware vSphere: Optimize & Scale

**Lesson Plan – by week or session**

**Session 1:**  
Course Introduction, Introduction to VMware Virtualization Lecture,  
Configuring VMware ESX and ESXi Lecture: Overview of ESX/ESXi,  
Configuring ESX/ESXi  
**Lab 1:** Configuring ESXi - Installing and Using VMware vCenter Server  
Lecture: Installing vCenter Server  
**Lab 2:** Installing vCenter Server - Using vCenter Server  
**Lab 3:** Using vCenter Server Network Standard Switches
Session 2: Lab 4: Standard Switches
  Modifying Virtual Switch Properties
Lab 5: Network Design Storage Concepts IP Storage: iSCSI and NFS
Lab 6: Accessing IP Storage Fibre Channel SAN Storage VMFS Datastores
Session 3: Lab 7: VMFS Datastores Virtual Machine Concepts Creating a Virtual Machine
  Lab 8: Creating a Virtual Machine Creating Templates and Clones
  Lab 9: Creating Templates and Clones

Session 4: VMware vCenter Converter
Lab 10: VMware vCenter Converter Modifying Virtual Machines
Lab 11: Modifying a Virtual Machine Managing Virtual Machines
Lab 12: Managing Virtual Machines Access Control Lecture

Lab 14: Resource Pools Virtual CPU and Memory Concepts Monitoring Resource Usage
Lab 15: Monitoring Performance Using Alarms

Session 7: Lab 16: Using Alarms Data Protection
Lab 17: VDR Scalability Lecture: vCenter Linked Mode Host Profiles

Session 8: Lab 18: Host Profiles vNetwork Distributed Switches
Lab 19: Create vNetwork Distributed Switch vMotion Migration
Lab 20: vMotion Migration VMware DRS Clusters

Session 9: Lab 21: DRS Clusters VMware DPM
Lab 22: DPM High Availability
Lab 23: VMware HA Managing High Availability

Session 10: Lab 24: VMware HA Network Redundancy Fault Tolerance
Lab 25: Configuring FT Patch Management
Lab 26: Using Update Manager Installing VMware ESX and ESXi

Course Sessions: listed are a guideline to indicate all topics that will be covered during your course. Do not plan your personal calendar based on these sessions. Your instructor will give you a calendar for your class that will indicate specific topics, assignments, and days.

Method of Evaluation: Unless otherwise stated, course completion is evaluated on the basis of attendance. Students must be in attendance 90% of the class time in order to be considered a successful completer of the course.

Students must be in attendance 90% of each course in a certificate series for successful completion and to earn a certificate as specified.

Students must complete all courses (core and no. of elective courses needed) to complete a certificate series within two years from start date of the first course taken.

Americans with Disabilities Act: Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student’s responsibility to contact the ACCESS office, SCC-G200 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current Collin Student Handbook for
additional information.
http://www.collin.edu/studentresources/personal/studenthandbook.aspx