El Centro College
ITMT 2475
Implementing an Advanced Server Infrastructure
Syllabus

COURSE DESCRIPTION

Prerequisites: ITMT 2474 or instructor approval.

Managing and maintaining a server infrastructure, planning and implementing a highly available enterprise infrastructure, planning and implementing a server virtualization infrastructure, and designing and implementing identity and access solutions.

This course is designed to help prepare students for successful completions of Microsoft Certification Exam 70-414. Additional certification information is available at http://www.microsoft.com/learning

This is a 4 credit hour course. (3 lec., 4 lab.)

END OF COURSE OUTCOMES

Upon completion of this course, the student will have the skills and knowledge necessary to design, implement, and maintain a Windows Server 2012/Windows Server 2012 R2 infrastructure in an enterprise scaled, highly virtualized environment. This course teaches the fundamentals of administering Windows Server 2012/Windows Server 2012 R2 systems. It is also designed to help individuals preparing to take Exam 70-414: Implementing an Advanced Server Infrastructure.

STUDENT LEARNING OUTCOMES

Upon successful completion of ITMT 2475 Implementing an Advanced Server Infrastructure the student will be able to:

- Design, implement and maintain a Windows Server 2012 R2 enterprise infrastructure
- Understand scaled and highly virtualized environments
- Configuring failover and network load balancing clusters
- Understand highly available storage solutions
- Knowledge of business continuity and disaster recovery processes
- Configuring of certificate services, federation servers, and rights management
- Understand the planning, configuring, and implementation of a virtual Hyper V and VMM environment

COURSE MATERIALS

A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

**Major Course Requirement**

Students will participate in **Course Discussion Forums** to collaborate with peers.

Students will review **Comprehensive Lecture** on each lesson topic.

Students will complete **Knowledge Assessment** related to concepts for each lesson topic.

Students will complete **Lesson Quizzes**, which evaluate the students’ knowledge in each of the topic areas.

Students will complete a **Midterm Exam** and comprehensive **Final Exam** to show student’s mastery of the course topics.

Students will complete comprehensive **Virtual Online Lab Exercises** on lecture technologies and concepts using a full-featured hosted online virtual environment.

In this online course, students will have access to additional content including **Topical External Links**, **Certification Information and Preparation Materials**, and **Software and Tools Downloads**, and additional study materials including **PowerPoint Decks**, and **Key Terms Glossaries**.

**Subject Matter**

Topics covered in the course include:

- Designing an Administrative Model
- Designing a Monitoring Strategy
- Planning and Implementing Automated Remediation
- Planning and Implementing Failover Cluster
- Planning and Implementing Highly Available Network Services
- Planning and Implementing Highly Available Storage Solutions
- Planning and Implementing Highly Available Roles
- Planning and Implementing a Business Continuity and Disaster Recovery Solution
- Planning and Implementing Virtualization Hosts
- Planning and Implementing Virtual Machines
- Planning and Implementing Virtualization Networking
- Planning and Implementing Virtualization Storage
- Planning and Implementing Virtual Machine Movement
- Managing and Maintaining a Server Virtualization Infrastructure
- Designing a Certificate Services Infrastructure
- Implementing and Managing a Certificate Services Infrastructure
- Implementing and Managing Certificates
Disclaimer
The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instruction. When necessary, appropriate notice of such changes will be given to the student.

The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

Policies
Students should click on the links below and read all of these policies.

General institutional policies
Course-related institutional policies