Implementing and Managing Microsoft Exchange (ITMT 2350)

Credit: 3 semester credit hours (2 hours lecture, 4 hours lab)

Prerequisite/Co-requisite: None

Course Description

Updating and supporting a reliable, secure messaging infrastructure used for creating, storing, and sharing information by using Microsoft Exchange Server. Includes a significant amount of hands-on practices, discussions, and assessments to assist students in becoming proficient in the skills necessary to update and support Exchange Server.

Required Textbook and Materials

1. *Exchange Server 2010 Administration: Real World Skills for MCITP Certification and Beyond (Exams 70-662 and 70-663*) by Joel Stidley, Erik Gustafson, John Wiley & Sons, 2010.

    a. ISBN number for print book is 978-0-470-62443-2

    b. ISBN number for E-book is 978-0-470-94735-7

2. Computer Networking and Troubleshooting Technology students are required to have one portable external Hard Drive with a capacity of 500GB or larger to be used for the duration of the time to complete their respective degree.

Course Objectives

Upon completion of this course, the student will be able to:

1. Perform a clean installation of Exchange Server and verify its success.

2. Configure and manage Exchange Server.

3. Secure Exchange Server 2003.

4. Manage public folders, address lists, client configuration and connectivity, routing, mobile devices, data storage and hardware resources.

5. Implement and manage client access with Internet protocols.

6. Plan for disaster and disaster recovery.

7. Perform back-up and restore procedures.

8. Perform preventive maintenance

9. Migrate users from Exchange Server 2007 to Exchange Server 2010.

ITMT 2350
Course Syllabus

Course Outline

A. Introduction to Exchange Server 2010
  1. Brief History of Exchange Servers
  2. New Features in Exchange Server 2010
  3. Client Benefits to Exchange Server 2012

B. Installing and Configuring Exchange Server 2010
  1. Understanding the Administrator's Job Role
  2. Installing Exchange Prerequisites
  3. Preparing the Infrastructure for Exchange Server
  4. Preparing the Infrastructure for Deployment
  5. Introducing the Server Roles
  6. Installing Microsoft Exchange Server 2010
  7. Understanding Role Based Access Control

C. Configuring Connectors, Routing and Transport, and Connectivity
  1. Configuring Connectors
  2. Configuring Message Routing and Transport
  3. Configuring Client Access

D. Managing Exchange Server 2010 Mail-Enabled Objects
  1. Understanding Databases in Exchange Server 2010
  2. Creating Resource Mailboxes
  3. Modifying Resource Mailbox Properties
  4. Mail-Enabled Groups
  5. Configuring Mail Contacts
  6. Moving Mailboxes
  7. The Exchange Control Panel

E. Configuring and Managing Public Folders
  1. Creating Public Folders
  2. Managing and Configuring Public Folders
  3. Replicating Your Public Folders

F. Configuring Security, Compliances, and Policies
  1. Configuring Role Based Access Control
  2. Introducing Message Compliance and Record Management
  3. Configuring Transport Rules
  4. Managing Policies and Address Lists

  5. Configuring Antivirus and Antispam Solutions

G. Configuring High-Availability Solutions for Exchange Server
  1. Introducing High Availability in Exchange Server 2010
  2. Managing a Database Availability Group
  3. Managing Database Copies
  4. Availability for Client Access, Hub Transport, and Edge Transport Rules

H. Disaster Recovery Operations for Exchange Server
  1. What is Disaster Recovery?
  2. Avoiding Disasters
  3. Configuring Backups
  4. Recovering Messaging Data
  5. Backing Up and Recovering Server Roles

I. Monitoring and Reporting with Exchange Server 2010
  1. Monitoring Databases
  2. Performance Message Tracking
  3. Monitoring Client Connectivity
  4. Creating Reports

J. Planning the Exchange Server 2010 Migration and Infrastructure
  1. Understanding the Messaging Professional's Role
  2. Using a Framework for Deploying Exchange Server 2010
  3. Preparing Exchange Server 2010 for Deployment
  4. Planning Namespaces
  5. Planning Your Migration

K. Designing and Deploying Mailbox Services
  1. Designing Mailbox Services
  2. Deploying the Mailbox Server

L. Designing Routing and Client Connectivity
  1. Server Transport and Routing Features
  2. Planning Exchange Server 2010 Routing
  3. Defining Transport Server Hardware
  4. Deploying the Exchange Server 2010 Infrastructure
  5. Client Access and Connectivity

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6. Deploying Client Access Servers
7. Choosing Hardware and Sizing
8. Deploying the Client Access Server Role

M. Designing Security and Compliance
1. Designing Messaging Security and Compliance
2. Planning Exchange Permissions Models
3. Designing Message Hygiene

4. Designing Client Access Security
5. Designing Message Archival and Discovery

N. Designing High Availability and Recovery
1. High Availability Overview
2. Designing and Deploying High Availability
3. Designing Exchange Backup and Recovery

Grade Scale

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

1. Labs	30%
2. Study Guides	10%
3. Chapter Tests	30%
4. Final Exam	30%

Course Requirements

1. Demonstrate proficiency through hands-on labs as assigned.

2. Complete Study Guides or work sheets as assigned.

Course Policies

1. No food, drinks, or use of tobacco products in class.

2. Beepers, telephones, headphones, and any other electronic devices must be turned off while in class.

3. Do not bring children to class.

4. No late assignments will be accepted.

5. Certification. If a student passes the certification test that is associated with this class, you will receive an "A" on the final exam and credit for 25% of your labs. If you have missed a previous test, you must still take the final exam to substitute for that grade.

6. Attendance Policy. Three absences are allowed. If a student is tardy to class or departs early three (3) times, it will be equal to one (1) absence. Each absence beyond three absences will result in a 2 point deduction from your final grade.

7. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.

8. Labs. Due dates will be announced by the instructor.

9. Tools. Return all tools and/or software to their designated place.

10. A grade of 'C' or better must be earned in this course for credit toward degree requirement.

11. Additional class policies as defined by the individual course instructor.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course Schedule

Week of	Topic	Reference
Week 1	Syllabus and policies	
	Course Introduction	
	Chapter 1: Introduction to Exchange Server 2010	pp. 1-26
Week 2	Chapter 2: Installing and Configuring Exchange Server 2010	pp. 29-72
Week 3	Chapter 2: Installing and Configuring Exchange Server 2010	pp. 29-72
Week 4	Chapter 3: Configuring Connectors, Routing and Transport, and Connectivity	pp. 73-152
Week 5	Chapter 4: Managing Exchange Server 2010 Mail-Enabled Objects	pp. 153-232
Week 6	Chapter 5: Configuring and Managing Public Folders	pp. 233-278
Week 7	Chapter 6: Configuring Security, Compliance, and Policies	pp. 279-358
Week 8	Chapter 7: Configuring High-Availability Solutions for Exchange Server	pp. 359-414

Week of	Topic	Reference
Week 9	Chapter 8: Disaster Recovery Operations for Exchange Server	pp. 415-442
Week 10	Chapter 9: Monitoring and Reporting with Exchange Server 2010	pp. 443-478
Week 11	Chapter 10: Planning the Exchange Server 2010 Migration and Infrastructure	pp. 481-506
Week 12	Chapter 11: Designing and Deploying Mailbox Services	pp. 507-530
Week 13	Chapter 12: Designing Routing and Client Connectivity	pp. 531-576
Week 14	Chapter 13: Designing Security and Compliance	pp. 577-604
Week 15	Chapter 14: Designing High Availability and Recovery	pp. 605-630
Week 16	Final Exam	

Contact Information:

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Additional Course Policies

Additional policies may be determined by individual course instructors. These policies will be indicated in the syllabus that is issued at the start of the course.