General Course Information Course: CRN 10374 CST K177 Server Technologies, Room B227 Hours: Lecture: 1720 - 2005, Lab: 2010 - 2150 Instructor: Ronald Leask Office: Three Rivers Community College Room C170 Office Hours: T, R 9:00 - 12:00 Office Phone: 860 885-2391 E-mail: <u>rleask@trcc.commet.edu</u>, Please e-mail me if you cannot attend class

# The ISBN for 70-642 text/lab manual and MLO is: 978-0-470-875025: This ISBN allows access to Microsoft Labs Online.

**Textbooks:** 1).Windows Server 2008: Network Infrastructure Configuration, Microsoft Certified Technology Specialist Exam 70-642, 2009, John Wiley & Sons, Inc, ISBN 978-0-470-22515-8

Lab Manual: 2). Windows Server 2008: Network Infrastructure Configuration, Microsoft Certified Technology Specialist Exam 70-642, 2009, John Wiley & Sons, Inc, ISBN 978-0-470-22514-1

**Reference: Textbook(s)**, not required: Can be obtained from Amazon.com. (1) MCTS, Exam 70-642, Configuring Windows Server 2008 Network Infrastructure, Training Kit, Tony Northrup and J. C. Mackin, 2008, John Wiley & Sons, Inc. ~ \$45.00. (2) The Complete Guide to Servers and Server+, Thomson/Delmar Learning, Michael Graves, ISBN- 13:978-1-4180-2023-1

(3) Server+ Guide to Advanced Hardware Support, James I. Conrad, 2002, ISBN 0-619-60202-9.

#### COURSE OBJECTIVES: Prerequisite: CSA\* K105 or permission of the instructor.

Students will acquire advanced-level technical knowledge of server software and technology, including installation, configuration, upgrading, maintenance, troubleshooting, security and authentication. Additionally, students will acquire advanced knowledge of network infrastructure, including software configuration of Dynamic Host Configuration Protocol (DHCP), Domain Name Server (DNS), Routing and Remote Access Server (RRAS), Internet Protocol Security (IPSec), File and Print services and, detailed knowledge of programming related terms and the differences between popular client and server models.

#### **Course Outcomes: Students will learn:**

- How to use a virtual machine to host different operating systems
- How to host Windows Server 2003 or Windows Server 2008 software on a virtual processor.
- How to use a virtual processor with operating system software to investigate details of Windows Server 2008.

- How to develop and design a technical PowerPoint presentation(s) and present it to your peers.
- How to use the Internet and virtual labs to conduct laboratory exercises using Windows Server 2008 software.
- How to install and use:
  - Windows Server 2008
  - Dynamic Host Configuration Protocol (DHCP)
  - Domain Name Server (DNS)
  - Internet Protocol Security (IPSec)
  - Routing and Remote Access Server (RRAS)
  - File and Print services

#### Overheads not on text CDR will distribute in class or put on mycommnet.

- Required: External hard-drive ~ 50 Gbytes, Cost ~ \$70.00, to hold Windows Virtual PC and Server 2008 software and any changes made in Laboratory exercises. All libratory computers in Room 227 are wiped clean daily. Will get a copy of Windows Server 2008 and Virtual PC from MSDNAA. A copy of Windows Server 2008, 120 evaluation edition, is also included on DVD with text book. Windows 2008 will be hosted on a virtual machine.(Virtual PC, for PCs, or V-Box for Mac or PCs)
- 2. Two CD-Rs, 700 MB, and two DVDs for virtual PC and Severs.

## **GRADING AND EVALUATION CRITERIA:**

60% of grade is based on lab assignments 40% of grade is based on end of chapter quizzes, and examinations **Students should keep a course notebook** 

Syllabus is subject to change to correct errors and when new information becomes available.

Week	Date	Chapter/Topic	Quizzes or Exams	Assignments /Labs	
Inst	talling the V	 Virtual PC (or V-Box) a			
1	1/20/11	Course Overview	Get Student's e-mail for Server 2008	None,	
2	1/27/11	Overview of MSDNAA Virtual PC	Get Student's e-mail for Server 2008	Install Virtual PC or Vbox	
3	2/03/11	Professional Day - NO CLASS on 2/03/11			
4	2/10/11	Ch1 Introduction to Networking Concepts		Install Windows Server 2008 on virtual PC or Vbox; LAB 1, Introducing Windows Server 2008 Networking, page 1	
5	2/17/11	Ch2 Installing Microsoft Windows Server 2008		LAB 2, Installing Windows Server 2008, page 14	
6	2/24/11	Ch3 Configuring and Managing the Dynamic Host Configuration Protocol (DHCP) Server Role		LAB 3, Configuring and Managing the DHCP Server, page 29	
7	3/03/12	Ch4 Configuring and Managing the Domain Name Server (DNS) Server Role	Exam	LAB 4 Configuring and Managing the Domain Name Server (DNS) Server Role, page 44	
8	3/10/11	Ch5 Configuring Routing and Remote Access (RRAS) and Wireless Networking March 13 -19 Spring Break		LAB 5 Configuring Routing and Remote Access (RRAS), page 63	

	No Class	March 13 - 19 Spring Break	<b>Classes Not</b>	In Session
9	3/24/11	Ch6 Configuring File Services		LAB 6 Configuring File Services, page 81
10	3/31/11	Ch7 Configuring Print Services		LAB 7 Configuring Print Services, page 99
11	4/07/11	Ch8 Maintaining and Updating Windows Server 2008	Exam	LAB 8 Maintaining and Updating Windows Server 2008, page 110
12	4/14/11	Ch9 Securing Data Transmission and Authentication		LAB 9, Securing Data Transmission and Authentication, page 128
13	4/21/11	Ch10 Configuring Network Health		LAB 10 Configuring Network Health, page 150
14	4/28/11	Ch11 Maintaining Windows Server 2008 File Services		LAB 11 Maintaining Windows Server 2008 File Services, page 167
15	5/05/11	Troubleshooting		Troubleshooting Lab
16	5/12/11		Exam	