# Computer Science Technology Department

Houston Community College
Department Phone Number:

Houston Community College

## Windows Server 2008 Network Infrastructure Configuration – MCITP Certification Track
## Course Syllabus

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| **Instructor** | **Name: Phong Dam**<br>**Tel: 713-718-6776 (Leave message using my name)**<br>**Office: By Appointment**<br>**Email: phong.dam@hccs.edu**<br>**Website**: http://learning.hccs.edu/faculty/phong.dam | | |
| **Course Reference Number (CRN)** | 81188 | **Course Level** | Intermediate |
| **Course Description:** | A course in Windows Server 2008 networking infrastructure to include installation, configuration, and troubleshooting of Internet Protocol (IP) addressing, network services and security. | | |
| **Course Prerequisite(s)** | ITMT 1371 Microsoft Windows 7 Configuration or ITNW 1425 Fundamental of Networking Technology | | |
| **Course Semester Credit Hours (SCH) (Lecture, Lab)** | Credit Hours 3.0 (Lecture 2, Lab 4) | | |
| **Course Location/Times** | West Loop Center - Room 154<br>Wednesday: 6pm - 10 pm | **Total Course Contact Hours** | 96 |
| **Instructional Materials (Textbook)** | Microsoft Official Academic Course 70-642: Windows Server 2008 Network Infrastructure. (Includes lab manual). Author: Microsoft Learning. ISBN 978-0-470-87501-8 Publisher: Wiley. http://www.wiley.com/WileyCDA/WileyTitle/productCd-EHEP001489.html | | |
| **Instructional Methods (select one)** | Face to Face | **Type of Instruction (Lecture, Lecture/Lab, COOP, Practicum** | Lecture/Lab |
| **Course Length (number of weeks)** | | 16 Weeks | |

## Course Requirement, Policy, and

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| **Instructor's Requirements** | - Each student need to have an external hard drive that has at least 100GB free space. USB3 external hard drive is preferred.<br>- Basic understand about operating system, file browsing, cut & paste, MS word. |
| **Instructor Grading Criteria** | |

| COURSE GRADING: | |
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| 30% | Final Exam |
| 30% | Mid Term |
| 10% | Assignments |
| 30% | Labs |
| 100% | TOTAL |

**Course Calendar**

| Week | Date | Topics | Readings | Exams |
|---|---|---|---|---|
| **1** | 01/15/2013 | Syllabus / Book / Course Review/ Labs | | |
| **2** | 01/22/2013 | Introduction to VMWare Virtualization technology<br>Introduction to Networking Concepts | Chapter 1 | |
| **3** | 01/29/2013 | Installing Microsoft Windows Server 2008<br>Lab Chapter 2 | Chapter 2 | |
| **4** | 02/05/2013 | Lab Chapter 2 | Chapter 2 | |
| **5** | 02/12/2013 | In class project | | |
| **6** | 02/19/2013 | Configuring and Managing DHCP Server Role | Chapter 3 | |
| **7** | 02/26/2013 | Configuring and Managing DNS server Role | Chapter 4 | |
| **8** | 03/05/2013 | Configuring Routing and Remote Access (RRAS) and Wireless Networking | Chapter 5 | |

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| **9** | 03/19/2013 | Configuring File Services | Chapter 6 | |
| **10** | 03/26/2013 | Midterm – Chapter 1-6<br>Configuring Print Services | Chapter 7 | |
| **11** | 04/02/2013 | Maintaining and Updating Windows Server 2008 | Chapter 8 | |
| **12** | 04/9/2013 | Securing Data Transmission and Authentication | Chapter 9 | |
| **13** | 04/16/2013 | Maintaining Network Health | Chapter 10 | |
| **14** | 04/23/2013 | Maintaining Windows Server 2008 File Services | Chapter 11 | |
| **15** | 04/30/2013 | Labs | Labs | |
| **16** | 05/07/2013 | Final – Chapter 7 - 11 | | Final |

# Learning Objective, Students Learning Outcome, and Program Spec

**Note**: This section of the syllabus provides the general course learning objectives, the expected students learning outcome, the course scope in terms of the department program, and the instrument used to evaluate the course. If you have any question, contact the instructor or the department.

**HCC Grading Scale**

| Grade | GPA Points |
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| A = 100- 90 | 4 points per semester hour |
| B = 89 - 80: | 3 points per semester hour |
| C = 79 - 70: | 2 points per semester hour |
| D = 69 - 60: | 1 points per semester hour |
| 59 and below = F | 0 points per semester hour |
| IP (In Progress) | 0 points per semester hour |
| W(Withdrawn) | 0 points per semester hour |
| I (Incomplete) | 0 points per semester hour |
| AUD (Audit) | 0 points per semester hour |

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

**Course Student Learning Outcomes (SLOs):**

After completing this course, students will be able to:

- Install and configure servers.
- Configure and troubleshoot DNS.
- Configure and manage WINS.
- Configure and troubleshoot DHCP.
- Configure and troubleshoot IPv6 TCP/IP.
- Configure and troubleshoot Routing and Remote Access.
- Install, configure, and troubleshoot the Network Policy Server Role service.
- Configure Network Access Protection.
- Configure, monitor and troubleshoot IPSec.
- Configure and manage Distributed File System.
- Configure and manage storage technologies.
- Configure availability of network resources and content.
- Configure server security compliance

In-depth coverage of the knowledge and skills necessary to understand Windows Server 2008 deployment, Windows Server 2008 monitoring, installation of server roles for Windows Server 2008, high-availability Windows Server 2008 deployment, maintain a Distributed File System (DFS) in Windows Server 2008, define server backup requirements and policies for Windows Server Backup, plan and implement a Windows Server 2008 restore.

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| **Learning Objectives** | |
| **Student Assignment(s)** | Refer to the course calendar |
| **Program/Discipline Requirements:** | Instructors will use standard syllabus that will satisfy CurricuUNET requirements and improve on-going assessment of student-centered learning and teaching. |
| **Academic Discipline/CTE Program Student Learning Outcomes (PSLOs)** | 1. Install, configure, upgrade, and troubleshoot personal computer operating systems<br>2. Install, configure and troubleshoot networking hardware, protocols and services<br>3. Manage and Maintain a Microsoft Windows Server 2008 or newer Environment/Network Infrastructure<br>4. Demonstrate knowledge in General Security Concepts, Communication Security, Infrastructure Security, and Unified Communications |
| **SCANS and/or Core Curriculum Competencies: If applicable** | C7: Interprets and Communicates Information<br>This course requires students to conduct original research into a network related topic, develop an understanding of a specific topic to a sufficient extent that they can interpret the information and communicate the information in a multimedia presentation to the class. These presentations usually mix audio with graphics in an integrated format consistent with the latest best practices in presentation methods.<br><br>C12: Exercises Leadership<br>Students exercise leadership to communicate ideas, thoughts, and feeling to justify a position on how to improve network performance. Students must take into account others viewpoints and consider a variety of options before making decisions that affect network performance.<br><br>C13: Negotiates to Arrive at a Decision<br>Students have the opportunity to work together in teams, collaborating on a group activity which will be shared with the class. They must come to common agreement through negotiations, which objectives they will satisfy in their collaboration, and decide how these objectives will be satisfied.<br><br>C18: Selects Technology<br>The multimedia presentation discussed in (C7) above requires the student to select the appropriate technology to deliver their presentation. There are required learning modules which showcase the presentation tools available, and the students will choose from a portfolio of effective tools, selecting the form and format which bests showcases their work.<br><br>F13: Responsibility<br>Students are evaluated by their peers in their collaborative efforts, as well as by their instructor. Therefore they will feel a strong responsibility to shoulder their share of the working load, and the evaluation matrix provides a self reinforcing encouragement to be responsible and accountable for their individual contributions to the projects of the whole.<br><br>F17: Integrity/ Honesty<br>Students in this course are expected to demonstrate integrity and honesty. They are treated as if they are employees, carrying out assignments as if they are in the work place, and are held accountable for their performance. They are made to understand through the work place norms the importance of trust, of completing their assigned share of the work, on time and also up to the expected standard of work. |
| **HCC Policy Statement** | |

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| **Access Student Services Policies on their Web site:** | http://hccs.edu/student-rights |
| **Distance Education and/or Continuing Education Policies** | |
| **Access DE Policies on their Web site:** | http://de.hccs.edu/de/de-student-handbook |
| **Access CE Policies on their Web site for non-credit classes:** | http://hccs.edu/CE-student-guidelines |
| **Competencies: If applicable** | |