

Pellissippi State Community College
Master Syllabus

**WINDOWS SERVER
CSIT 2710**

Class Hours: 3.0
Credit Hours: 4.0
Laboratory Hours: 3.0
Revised: 12/03/2010

Instructor:
Office:
Phone:
Email:

NOTE: This course is not designed for transfer credit.

Catalog Course Description:

This course is designed for computer personnel who must install, support, and manage a small to medium-sized Microsoft Windows network environment. The course emphasizes configuring the Microsoft Windows server operating system for a typical network installation. Major topics included in the course are managing desktop environments and software with group policies, managing file resources and disks, supporting Microsoft Active Directory, TCP/IP, DHCP, DNS, and Internet Information Services, configuring remote access services (RAS), and implementing disaster protection, backup, and recovery techniques.

Entry Level Standards:

The entering student MUST be familiar with the Microsoft Windows XP operating system and/or Windows Vista and/or Server 2003/2008 operating systems and be able to demonstrate intermediate-level computer hardware knowledge. Problem solving and analytical skills are also important.

Prerequisites: CSIT 1740 or consent of instructor

Textbook(s) and Other Course Materials:

Required Texts:

1. *MCSA/MCSE Self-Paced Training Kit (Exam 70-290): Managing and Maintaining a Microsoft® Windows Server™ 2003 Environment* by Dan Holme and Orin Thomas, 2nd ed. Microsoft Press. ISBN: 978-0-7356-2289-0

Or

2. *MCSA/MCSE Self-Paced Training Kit (Exams 70-290, 70-291, 70-293, 70-294): Microsoft® Windows Server™ 2003 Core Requirements*, 2nd ed. by Don Holme, Orin Thomas, and others. ISBN: 978-0-7356-2290-6

Optional Text: (if class progresses and completes Server 2003 coursework)

3. *Windows Server 2008 Administrator*, by Craig Zacker, Microsoft Official Academic Course for Exam 70-646. ISBN: 978-0-470-22511-0.

References:

1. *Microsoft® Windows Server™ 2003 Inside Out*, .by William R. Stranek. ISBN: 0-7356-2048-2
2. *Microsoft® Windows Server™ 2008 Inside Out*, .by William R. Stranek. ISBN: 0-7356-2438-0

3. *Implementing, Managing and Maintaining a Microsoft Windows Server 2003 Network Infrastructure (70-291)*, by Greg Bott, Microsoft Press. ISBN 0-0729-4488-9.
4. *Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure (70-293)*, by Craig Zacker, Microsoft Press. ISBN 0-0729-4489-7.
5. *Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure (70-294)*, by Wendy Corbin, Microsoft Press. ISBN 0-0729-4490-0.

Required Hardware:

6. USB Flash Drive (8 GB minimum)
7. CD-R/DVD-R: Minimum of 10 each may be used in this course for software installation
8. Portable Hard Disk drive, USB (2.0/3.0) interface This will be used for moving virtual machine operating systems between PSCC labs and another computer at home, etc.
9. PC at home or other location that is capable of running a virtualization environment (Microsoft's Virtual PC or VMWare's Workstation) with at least one virtual server. This requires a fast CPU and a minimum of 4GB RAM. If you do not have access to such a computing environment out of laboratory, you will have to do all your REQUIRED laboratory experiences in the PSCC Server laboratory environment.

I. WEEK/UNIT/TOPIC BASIS:

Week	Topic(s)
1	Introduction, Topic Overview, Schedule Overview of Microsoft Windows 2003/2008 networking concepts
2	Managing Client and Server Computers; Managing Disks (Storage Resources)
2-3	Using NTFS Permissions to Secure Computer Resources
3-4	Monitoring Server Health and Security
5-6	Microsoft Active Directory Concepts; Installing Active Directory: Extra material
7	Managing Active Directory User and Computer Objects
7-8	Managing Active Directory Group Objects
8-9	Using Group Policies
10-11	Files and Folders; Managing Resources with Active Directory
11-12	Backing Up Data; Recovering from System Failure
12-13	Printers
13-14	Maintaining the Operating System; Managing Hardware Devices and Drivers
15	All Projects Due; Final Exam Period

II. COURSE GOALS:*

The course will

- A. Develop/enhance the student's knowledge of and skill in designing/planning a Microsoft Windows 2003/2008 System. I,II,III,IV,IX
- B. Develop/enhance the student's knowledge of and skill in installing Microsoft Windows 2003/2008 (Professional and Server). I,II,III,IV,IX
- C. Develop/enhance the student's knowledge of and skill in managing/administering Microsoft Windows 2003/2008. III,IV
- D. Develop/enhance the student's knowledge of DNS I,II,III,IV,IX
- E. Develop/enhance the student's knowledge of and skill in installing and configuring the DNS Service. I,II,III,IV,IX
- F. Develop/enhance the student's knowledge of and skill in using Microsoft Active Directory Services I,II,III,IV,IX
- G. Develop/enhance the student's knowledge of and skill in planning, implementing, and administering Microsoft Active Directory. I,II,III,IV,IX
- H. Develop/enhance the student's knowledge of and skill using Group Policy. I,II,III,IV,IX
- I. Develop/enhance the student's knowledge of and skill in applying and configuring Group Policy. I,II,III,IV,IX
- J. Develop/enhance the student's knowledge of and skill in managing software by using Group Policy. I,II,III,IV,IX
- K. Develop/enhance the student's knowledge of and skill of managing file resources and disks. I,II,III,IV,IX
- L. Develop/enhance the student's knowledge of and skill in configuring Remote Access Services (RAS). I,II,III,IV,IX
- M. Develop/enhance the student's knowledge of and skill in supporting DHCP and WINS in Windows 2003/2008. I,II,III,IV,IX
- N. Develop/enhance the student's knowledge of and skill in implementing disaster protection in Windows 2003/2008 systems. I,II,III,IV,IX
- O. Develop/enhance the student's knowledge of and skill in using Windows 2003/2008 TCP/IP. I,II,III,IV,IX
- P. Develop/enhance the student's knowledge of and skill of upgrading client operating systems. I,II,III,IV,IX
- Q. Develop/enhance the student's knowledge of and skill of performing Remote Installation Services (RIS). I,II,III,IV,IX
- R. Develop/enhance the student's knowledge of and skill of implementing user and security management I,II,III,IV,IX
- S. Develop/enhance the student's knowledge of and skill of solving common performance problems. I,II,III,IV,IX
- T. Develop/enhance the student's knowledge of and skill of using client service, teamwork skills and good communications skills to resolve problems and complete tasks. I,II,III,IV,IX

*Roman numerals after course objectives reference goals of the CSIT program.

III. EXPECTED STUDENT LEARNING OUTCOMES:*

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

1. Explain features of the Windows 2003/2008 system. A..T
2. Plan and prepare for the installation for Windows 2003/2008. A,B,C
3. Install Windows 2003/2008 from a CD-ROM. A,B,C
4. Install Windows 2003/2008 from a network. A,B,C

5. Troubleshoot Windows 2003/2008 setup problems. A,B,C
6. Explain the features, operations, etc. of Microsoft DNS. D
7. Install, configure, and troubleshoot the DNS Service. D,E
8. Explain the features, operations, etc. of Active Directory Services. F
9. Install, configure, and troubleshoot the Active Directory Service. F,G,H,I
10. Explain the concept of Group Policy for managing a Windows 2003/2008 system. F,G,H,I,J
11. Apply and configure Group Policy for managing desktop environments. F,G,H,I,J
12. Use Group Policy to manage software deployment and upgrades. J
13. Explain the tasks for managing file and disk resources in a Windows 2003/2008 system. K
14. Use the available techniques for managing file resources on a Windows 2003/2008 system. K
15. Understand the new authentication protocols in a Windows 2003/2008 system. L,R
16. Configure inbound and outbound connections with RAS. L,R
17. Create and examine remote Access Policies. L,R
18. Explain new Microsoft DHCP and WINS functionalities in Windows 2003/2008 system. M
19. Perform common disk management tasks in Windows 2003/2008 system. K,S,T
20. Explain disaster protection options for Windows 2003/2008 systems. N,R,S
21. Use backup and restore procedures available for a Windows 2003/2008 system. N,R,S
22. Perform an emergency disk repair for a damaged Windows 2003/2008 system installation.
N,S,T
23. Plan and implement a Windows 2003/2008 TCP/IP configuration. O,P
24. Plan and perform a remote Windows 2003/2008 system installation using Remote Installation Services (RIS). P,Q,S,T

*Letters after performance expectations reference the course objectives listed above.

IV. **EVALUATION:**

- A. Testing Procedures: 40% OF THE FINAL GRADE
At least Three (3) MAJOR examinations will be given. An alternative is to have examinations after each chapter /subject has been completed. There will be NO make-up tests unless prior arrangements are made with the instructor.
- B. Laboratory Expectations: 60% OF THE FINAL GRADE
Laboratory exercises, examination question preparation, and project documentations are required. Case-study projects are integral parts of this course! If assigned, A COMPREHENSIVE final term project will be DUE NO LATER THAN the scheduled Final Exam period. This project WILL consist of a laboratory requiring a network system installation, configuration, and DETAILED documentation using ALL material learned during the semester.
- C. Field Work: N/A
- D. Other Evaluation Methods: N/A
- E. Grading Scale:
For all examinations and other assignments, projects, etc. given, the final grade will be determined by the following scale: (the percentage based on the maximum number of points possible in a semester)

93 – 100%	A
88 – 92%	B+
83 – 87%	B
78 – 82%	C+
73 – 77%	C
65 – 72%	D
Below 65%	F

V. **POLICIES:**

A. **Attendance Policy:**

This course uses software and hardware not normally available out-of-class to students. Regular attendance is required for success in this class. Refer to the Class Policies document for more information.

Pellissippi State Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Maintaining continuous attendance in your classes is very important. If you are considering dropping or withdrawing from a course, please check with the Financial Aid Office before doing so. Dropping or withdrawing from a class can adversely affect your financial aid and/or lottery eligibility.

B. **Academic Dishonesty:**

Plagiarism, cheating and other forms of academic dishonesty are prohibited. A student guilty of academic misconduct, either directly or indirectly through participation or assistance, is immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions that may be imposed through the regular Pellissippi State procedures as a result of academic misconduct, the instructor has the authority to assign an F or a zero for the exercise or examination or to assign an F in the course. (*Pellissippi State Online Catalog*)

C. **Computer Usage Guidelines:**

College-owned or –operated computing resources are provided for use by students of Pellissippi State. All students are responsible for the usage of Pellissippi State's computing resources in an effective, efficient, ethical and lawful manner. (*Pellissippi State Online Catalog*)

D. **Accommodation for Disabilities:**

If you need accommodations because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please inform the instructor immediately. Please see the instructor privately after class or in his/her office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127, 132, 134, 135 or by phone: 694-6429(TTY) or 539-7153 (Voice). More information is available at www.pstcc.edu/departments/swd/.