

Pellissippi State Community College
Master Syllabus

**WINDOWS PROFESSIONAL
CSIT 2700**

Class Hours: 3.0
Credit Hours: 4.0
Laboratory Hours: 3.0
Revised: January 2010

Instructor:
Office:
Phone:
Email:

Note: This course is not intended for transfer credit.

Catalog Course Description:

The course covers installing Windows XP and the most current Microsoft Windows client operating system; implementing and conducting administration of resources; implementing, managing and troubleshooting hardware devices and drivers, network protocols and security; monitoring and optimizing performance and reliability; and configuring and troubleshooting the desktop environment.

Entry Level Standards:

The student MUST be familiar with the architecture and operations of standard PCs (personal computers).

The student must be able to use Microsoft Windows to create directories and to copy, move, rename, and delete directories and files. Previous knowledge and understanding of DOS commands such as DIR, COPY, DEL, REN, CD, MD, RD, and EDIT is essential.

The student must have math, writing, verbal and English language skills at the college entry level.

Prerequisites: CSIT 1720

Textbook(s) and Other Reference Materials Basic to the Course:

MCSA/MCSE Self-Paced Training Kit (Exam 70-270): Installing, Configuring, and Administering Microsoft Windows XP Professional, Second Edition, Walter Glenn and Tony Northrup, Microsoft Press. ISBN 9780735621527

Online references and training materials for Windows Vista and Windows 7

I. WEEK/UNIT/TOPIC BASIS:

Week	Topic
1	Introduction to Windows XP/Vista/Windows 7
2	Installing Windows XP/Vista/Windows 7 in a Virtual Environment (VMWare, Virtual PC)
3	Microsoft Management Console and Windows Control Panel
4	Using the Registry and Managing Disks
5	Installing and Configuring Network Protocols and Using DNS Service
6	Setting Up and Managing User Accounts
7	Setting Up and Managing Groups and Configuring Network Printers
8	Administering Network Printers and Securing Resources with NTFS Permissions
9	Administering Shared Folders and Auditing Resources and Events

- 10 Configuring Group Policy and Local Security Policy and Managing Data Storage
- 11 Backing Up and Restoring Data and Monitoring Access to Network Resources
- 12 Configuring Remote Access and the Windows XP/Vista/Windows 7 Boot Process
- 13 Deploying Windows XP/Vista and Configuring Windows XP/Vista for Mobile Computers
- 13-14 Implementing, Managing, and Troubleshooting Hardware Devices and Drivers
- 14 Preparation for Windows XP/Vista Exam and Project Demonstrations
- 15 Final Exam Period; all projects DUE!

II. COURSE OBJECTIVES*:

- A. Develop a working understanding of the terminology, hardware devices, and system software associated with computer networks. III, II, V, IX, X
- B. Exhibit knowledge of basic and advanced features of Microsoft Windows concepts. II, III, IX
- C. Exhibit knowledge of the modern Windows operating systems. II, III, IX
- D. Exhibit knowledge of diagnosing and troubleshooting Window problems. II,III,V
- E. Exhibit knowledge of installing, configuring, and upgrading Window components and software. II, IX
- F. Exhibit proficiency in written and oral communications about computers. I,IX

*Roman numerals after course objectives reference goals of the Business and Computer Technology department.

III. INSTRUCTIONAL PROCESSES:

Students will:

1. Use Windows operating systems commands and utilities to perform practical tasks for personal computing. *Technological Literacy Outcome, Transitional Strategy, Active Learning Strategy*
2. Solve problems by diagnosing and troubleshooting Windows problems. *Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy*
3. Solve problems encountered in the installation, configuration, and upgrading of Windows components and system software. *Technological Literacy Outcome, Transitional Strategy, Active Learning Strategy*
4. Participate in problem-solving teams. *Communication Outcome, Transitional Strategy, Active Learning Strategy*
5. Handle and examine modern computing devices. *Technological Literacy Outcome, Transitional Strategy*
6. Prepare documents for management explaining PC system problems and the need for new systems, upgrades, networks, etc. *Communication Outcome, Technological Literacy Outcome, Transitional Strategy, Active Learning Strategy*
7. Practice elements of the work ethic such as punctuality, professionalism, dependability, cooperation, and contribution. *Social/Behavioral Sciences Outcome*

IV. EXPECTATIONS FOR STUDENT PERFORMANCE*:

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

1. Use terminology associated with computer science and networking fields. A,B,C,D,E
2. Identify ways to navigate the operating system and how to get to needed technical information. A,B,C
3. Understand the differences between the Windows Server and Windows Client Operating Systems. B,C
4. Understand the design goals of Windows operating systems. B,C
5. List the system requirements for Windows operating systems. B,C,E,F
6. Understand the new features included in Windows. B,C
7. Explain why Windows is an important tool for network administrators. C
8. Install Windows client operating systems E
9. Troubleshoot Windows installation problems. D
10. Log on and properly shut down Windows systems. C
11. Use and customize the taskbar. C
12. Customize the Start Button options. C
13. Set up a mapped drive from network neighborhood. C
14. Synchronize files with My Briefcase. C
15. Explain the contents of the Control Panel. C
16. Use the Display Icon to set up a screen saver or to adjust video settings. C
17. Use the Network Icon to set up IPX/SPX and TCP/IP network connectivity. B,C
18. Install a network service. B,C
19. Set up to use remote access and dial-up services. B,C
20. Connect to a database using the ODBC Icon. B,C
21. Add new Windows software components. B,C,E
22. Describe the installation procedures for a tape drive. E
23. Discuss ways in which to use Windows as a server. B,C
24. Create a user profile or a logon script. B,C
25. Install a printer. B,C,E
26. Set up an uninterruptable power supply. B,C,E
27. Install application software. E
28. Use a registry editor and make changes to the registry. B,C
29. Use the Task manager and the Performance Monitor to diagnose performance problems. B,C
30. Troubleshoot printer problems. D,C,D
31. Troubleshoot boot problems. B,C,D
32. Monitor Network Performance. A,B,C,D
33. Understand the components of a LAN. A
34. Describe the difference between coaxial and twisted pair cable. A
35. Comprehend the use of Ethernet and Token Ring networks. A
36. Understand network topologies. A
37. List the basic design principles of networking. A
38. Budget and determine the cost of a network. A
39. Set up network communications in Windows. B,C,E
40. Choose a tape backup system. B,C
41. Install server components. B,C,E
42. Select a client operating system. B,C
43. Install an NIC driver. B,E
44. Resolve a resource conflict on a client. B,D
45. Set up a computer name for a client. B,C

46. Verify network parameters on a client. B,C
47. Plan for the client installation. A,B,C,E
48. Explain the differences in file systems used by Microsoft operating systems. A,B, C
49. Determine when to set up a network for workgroups or domains. B,C
50. Create accounts and groups by using the administration wizards. B,C,E
51. View, pause, cancel, and resume print jobs. B,C,E
52. Address Windows problems. A,B,C,D
53. Identify NIC problems. A,B,C,D

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

V. **EVALUATION:**

A. **Testing Procedures:**

A minimum of three comprehensive 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:**

Lab attendance is required. Assignments must be completed and submitted by the assigned deadline. This is a coordinated laboratory class, and assignments must be completed as scheduled. Labs may be visually assessed or require hardcopy upon completion for credit. Case-study projects (comprehensive) may be used in this class/laboratory.

C. **Field Work:** N/A

D. **Other Evaluation Methods:**

Pop-Quizzes and “Outside-Class” take-home assignments may be given.

E. **Grading Scale:**

Points will be accumulated and a percentage of all possible points will be computed as shown on the grading scale below. To determine your grade calculate your total scores and subsequently the total possible points, and then compute your percentage of the total.

You will be required to produce a current grade calculation periodically during the semester in order to assure you maintain current knowledge of your grades.

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

VI. POLICIES:

A. Attendance Policy:

Pellissippi State Technical 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. (*Pellissippi State Online Catalog*)

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:

Students who need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his 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 Goins134 or 126 or by phone: 694-6751 (Voice/TTY) or 539-7153. More information is available at www.pstcc.edu/departments/swd/

E. Other Policies:

Behavior is expected to conform to Pellissippi State Catalog and to the normal classroom behavioral expectations to include:

- Do not use the keyboard or become involved in distracting conversations during presentations, discussions, and other teacher lead instructive processes.
- Do not eat, drink, or use tobacco products in the computer lab (Pellissippi State policy).
- Refrain from making noise that will distract other students especially during exams.
- Support other classmates and faculty.
- Arrive on time and prepared to contribute to classroom discussions. Late arrivals will be recorded as an absence without rationale or after four instances of arriving late.