PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

WINDOWS PROFESSIONAL
NETW 1200

Class Hours: 3.0 Credit Hours: 4.0
Laboratory Hours: 3.0 Date Revised: Fall 00

NOTE: This course is not intended for transfer credit.

Catalog Course Description:

The course covers installing Windows 2000; 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:

None

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

MCSE Windows 2000 Professional Exam by Rick Wallace, Microsoft Press. ISBN 157231-901-1
Release on 9/24/2000

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Windows 2000</td>
</tr>
<tr>
<td>2</td>
<td>Installing Windows 2000 Professional</td>
</tr>
<tr>
<td>3</td>
<td>Microsoft Management Console and Windows Control Panel</td>
</tr>
<tr>
<td>4</td>
<td>Using the Registry and Managing Disks</td>
</tr>
<tr>
<td>5</td>
<td>Installing and Configuring Network Protocols and Using DNS Service</td>
</tr>
<tr>
<td>6</td>
<td>Introducing Active Directory Services and Setting Up and Managing User Accounts</td>
</tr>
</tbody>
</table>
Setting Up and Managing Groups and Configuring Network Printers

Administering Network Printers and Securing Resources with NTFS Permissions

Administering Shared Folders and Auditing Resources and Events

Configuring Group Policy and Local Security Policy and Managing Data Storage

Back up and Restoring Data and Monitoring Access to Network Resources

Configuring Remote Access and the Windows 2000 Boot Process


Implementing, Managing, and Troubleshooting Hardware Devices and Drivers

Preparing for Windows 2000 Exam and Project Demonstrations

Final Exam Period

II. Course Objectives*:

A. Develop a working understanding of the terminology, hardware devices, and system software associated with computer networks. II, II, V, IX, X

B. Exhibit a knowledge of basic and advanced features of Microsoft Windows NT concepts. II, III, IX

C. Exhibit a knowledge of the Windows NT operating system. II, III, IX

D. Exhibit a knowledge of diagnosing and troubleshooting Windows NT. II, III, V

E. Exhibit a knowledge of installing, configuring, and upgrading Windows NT 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 95/98 and DOS operating systems commands and utilities to perform practical tasks for personal computing. Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy

2. Solve problems by diagnosing and troubleshooting Windows NT problems. Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy

3. Solve problems encountered in the installation, configuration, and upgrading of Windows NT components and system software. Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy 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, Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy*

7. Practice elements of the work ethic such as punctuality, professionalism, dependability, cooperation, and contribution. *Personal Development Outcome*

*Strategies and outcomes listed after instructional processes reference Pellissippi State’s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

**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
4. Understand the design goals of Windows NT Workstation. B,C
5. List the system requirements for NT Workstation. B,C,E,F
6. Understand the new features included in NT Workstation. B,C
7. Explain why NT Workstation is an important tool for network administrators. C
8. Install Windows NT Workstation E
9. Troubleshoot NT Workstation installation problems. D
10. Log on and properly shut down Windows NT Workstation. 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
22. Install a tape drive. E
23. Discuss ways in which to use NT Workstation as a server. B,C
24. Create a user profile or a logon script. B,C
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
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
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 NT 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 workstation 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:

   See Grading Scale below.

B. Laboratory Expectations:

   Lab attendance is required. Assignments worth 30 points each and 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.

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 based on the relative evaluative measure value and quantified based on the grading scale below. To determine your grade calculate your total scores and subsequently the total possible points. One example would be:

<table>
<thead>
<tr>
<th></th>
<th>Possible</th>
<th>Your Scores</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretests</td>
<td>10 X 15 = 150</td>
<td>8,9,10,10 etc.</td>
<td>125</td>
</tr>
<tr>
<td>Chapter Tests</td>
<td>30 X 15 = 450</td>
<td>22, 24, 25 etc.</td>
<td>400</td>
</tr>
<tr>
<td>Tests</td>
<td>200 X 3 = 600</td>
<td>198, 177, 199</td>
<td>574</td>
</tr>
<tr>
<td>Presentation</td>
<td>400</td>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>Network Labs</td>
<td>30 X 15 = 450</td>
<td>30, 20, 0, etc.</td>
<td>398</td>
</tr>
<tr>
<td>Extra Credit</td>
<td>TBA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class Assignments</td>
<td>TBA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Divide your total points by the possible points.

\[
\frac{1847}{2050} = 90 \% 
\]
resulting in an A.

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. The class as a whole is welcome to present for consideration other ideas about changes to those measures of evaluation. Online tests, available on the net, can be used in a limited measure for extra credit.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
</tr>
</tbody>
</table>

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.

Regular Lab/Tutorial attendance is necessary for successful completion of the course. Excessive absence or a casual attitude towards the course work invariably has a negative effect upon the grade of the student. Students are expected to promptly attend all lecture and lab classes as assigned.

B. Academic Dishonesty:

Plagiarism, cheating, software piracy, non-educational use of computer systems and other forms of academic dishonesty are strictly prohibited.

C. 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.
- Do not make derogatory comments about remarks - "Well, that's wrongggggg." Remember you are only an expert in this field momentarily.
- Act as a member of a team and validate all members by sharing rather than flaunting your expertise.
- 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.
- Learning should be a challenge and "fun" not an artificial hoop to jump through. Support this idea!

Other basic classroom behavioral peer and mentor consideration is expected and will be promoted during the semester.