UPGRADING OPERATING SYSTEMS  
NETW 2120

Class Hours: 3.0
Laboratory Hours: 3.0
Credit Hours: 4.0
Date Revised: Spring 01

Catalog Course Description:
Topics include upgrade rationale; migration techniques for ASP applications; recreating existing Web sites and virtual directories; and monitoring production applications.

Entry Level Standards:
The entering student should be skilled with the Microsoft Windows NT 4 operating systems and be able to demonstrate advanced computer knowledge. Problem solving and analytical skills are also important.

Prerequisite:
NETW 1200

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

Textbook and Supplies:
3 2” HD Diskettes
3-ring notebook w/pocket

Suggested Optional Supplementals:
Outside reading, magazines, the Internet, vendor materials.

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction, Topic Overview, Schedule; Overview of Microsoft Windows 2000 Platform</td>
</tr>
<tr>
<td>2</td>
<td>Installing Windows 2000</td>
</tr>
<tr>
<td>3</td>
<td>Configuring the DNS Service</td>
</tr>
<tr>
<td>4</td>
<td>Implementing Active Directory Services; Exam #1 review</td>
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<tr>
<td>5</td>
<td>Exam #1; Administering Active Directory Services</td>
</tr>
</tbody>
</table>
II. Course Objectives*:

A. Demonstrate knowledge of designing/planning a Microsoft Windows 2000 System. I, II, IV
B. Demonstrate knowledge of installing Microsoft Windows 2000. II, IV
C. Demonstrate knowledge of managing/administering Microsoft Windows 2000. III, IV
D. Demonstrate knowledge of DNS. I, II, III, IV
E. Demonstrate knowledge of installing and configuring the DNS Service. III, IV
F. Demonstrate knowledge of Microsoft Active Directory Services. II, IV, V, VIII
G. Demonstrate knowledge of planning, implementing, and administering Microsoft Active Directory. II, III, IV
H. Demonstrate knowledge of Group Policy. III, IV
I. Demonstrate knowledge of applying and configuring Group Policy. III, IV
J. Demonstrate knowledge of managing software by using Group Policy. III, IV
K. Demonstrate knowledge of managing file resources and disks. III, IV
L. Demonstrate knowledge of configuring Remote Access Services (RAS). III, IV
M. Demonstrate knowledge of supporting DHCP and WINS in Windows 2000. III, IV
N. Demonstrate knowledge of implementing disaster protection in Windows 2000 systems. III, IV
O. Demonstrate knowledge of upgrading a network from NT 4 to NT 5 (Windows 2000).
III,IV

P. Demonstrate knowledge of upgrading client operating systems. III,IV

Q. Demonstrate knowledge of performing Remote Installation Services (RIS). III,IV

R. Demonstrate knowledge of user and security management. III,IV

S. Demonstrate knowledge of solving common performance problems. I,III,IV

T. Demonstrate client service, teamwork skills and good communications skills to resolve problems and complete tasks. I,II,IX

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

III. Instructional Processes*:

Students will:


2. Demonstrate knowledge of networking, electronic communication, and associated subjects. Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome


5. Handle and examine modern computing devices. Technological Literacy Outcome, Personal Development Outcome, Transitional Strategy, Active Learning Strategy

6. Prepare documents and presentations for management explaining computer networks and communications hardware/software, etc. to meet user requirements. 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:

3. Install Windows 2000 from a CD-ROM. B,T
6. Explain the features, operations, etc. of Microsoft DNS. D
7. Install, configure, and troubleshoot the DNS Service. E,T
8. Explain the features, operations, etc. of Active Directory Services. F
9. Install, configure, and troubleshoot the Active Directory Service. G,T
10. Explain the concept of Group Policy for managing a Windows 2000 system. H
11. Apply and configure Group Policy for managing desktop environments. I,T
12. Use Group Policy to manage software deployment and upgrades. J
13. Explain the tasks for managing file and disk resources in a Windows 2000 system. K
14. Use the available techniques for managing file resources on a Windows 2000 system. K,T
15. Understand the new authentication protocols in a Windows 2000 system. L
16. Configure inbound and outbound connections with RAS. L,T
17. Create and examine remote Access Policies. L
18. Explain new Microsoft DHCP and WINS functionalities in Windows 2000 system. M
23. Plan and implement a network upgrade from Windows NT 4 to NT 5 (Windows 2000). O,P,S,T

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

V. Evaluation:

A. Testing Procedures:

Three (3) examinations each worth 200 points will be given. Each will be cumulative.

B. Laboratory Expectations:
Hands-on learning activities done individually and in teams will also serve as the basis for course evaluation.

C. Field Work:

N/A

D. Other Evaluation Methods:

Other assessment activities worth 400 points will consist of special projects, research papers, team activities, essays, short answer documents, or other work assigned.

E. Grading Scale:

<table>
<thead>
<tr>
<th>Points Range</th>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>920 - 1000</td>
<td>A</td>
<td>92%-100%</td>
</tr>
<tr>
<td>820 - 919</td>
<td>B</td>
<td>82%-91.9%</td>
</tr>
<tr>
<td>700 - 819</td>
<td>C</td>
<td>70%-81.9%</td>
</tr>
<tr>
<td>650 - 699</td>
<td>D</td>
<td>65%-69.9%</td>
</tr>
<tr>
<td>&lt; 649</td>
<td>F</td>
<td>0%-64.99%</td>
</tr>
</tbody>
</table>

VI. Policies:

Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled required 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.