PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

DIRECTORY SERVICES INFRASTRUCTURE
NETW 2010

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

Catalog Course Description:
This course provides instruction in the analysis of business requirements for directory services resources in a Windows 2000 network operating system. Topics include analyzing business and technical requirements; and designing directory service architecture.

Entry Level Standards:
The entering student should have a familiarity with the Windows 2000 Server operating system and the Windows environment. The entering student should be able to keyboard at least 23 words per minute with 5 or fewer errors.

Corequisite:
NETW 1220

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

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understanding Active Directory</td>
</tr>
<tr>
<td>2</td>
<td>Planning and Conducting Your Business Assessment</td>
</tr>
<tr>
<td>3</td>
<td>Analyzing the Results of the Business Assessment</td>
</tr>
<tr>
<td>4</td>
<td>Analyzing the IT Administrative Model</td>
</tr>
<tr>
<td>5</td>
<td>Analyzing the Physical Environment</td>
</tr>
<tr>
<td>6</td>
<td>Exam One – Analyzing Performance-Related Requirements</td>
</tr>
<tr>
<td>7</td>
<td>Analyzing Security Requirements</td>
</tr>
<tr>
<td>8</td>
<td>Impact of Active Directory</td>
</tr>
<tr>
<td>9</td>
<td>End-User Needs and Desktop Management</td>
</tr>
</tbody>
</table>
II. Course Objectives*:

A. Analyze the existing and planned business models. I IV V VII
B. Analyze factors that influence company strategies. I III IV V VII
C. Evaluate the company’s existing and planned technical environment. II III V VII
D. Analyze the impact of Active Directory on the technical environment. II III IV V IX
E. Design the Directory Service Architecture. I III V VII IX XI
F. Design an Active Directory site topology. I II IV V VII IX
G. Design Service Locations of operations masters and global servers. I III V VI VIII X XII

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

III. Instructional Processes*:

Students will:

1. Use professional tools to design Windows 2000 Active Directory components and documentation. Technological Literacy Outcome, Personal Development Outcome, Transitional Strategy, Active Learning Strategy
2. Manage, monitor, and optimize a directory service architecture. Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy
3. Participate in a deployment team for analyzing company strategies. Communication Outcome, Problem Solving and Decision Making Outcome, Transitional Strategy, Active Learning Strategy
4. Practice elements of the work ethic such as punctuality, professionalism, dependability, cooperation, and contribution. Personal Development Outcome
5. Analyze and present models of IT management to the class. Communication Outcome, Personal Development Outcome, Active Learning Strategy
6. Participate in a peer review of individual and group projects. Problem Solving and Decision Making Outcome, Communication Outcome, Transitional Strategy, Active Learning
*Strategy*

7. Use professionally accepted methods and materials in completion of designing service locations. *Technological Literacy Outcome, Personal Development Outcome, Transitional Strategy*

*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. Analyze the company model and the geographical scope. A B C D
2. Analyze factors that influence company strategies. B C D
3. Evaluate the company’s existing and planned technical environment. C D F
4. Analyze the impact of Active Directory on the technical environment. C D E F
5. Design an Active Directory structure, naming strategy, and topology. A E F
6. Design an Active Directory implementation plan. G H
7. Design the placement of DNS servers and domain controllers. D F

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

**V. Evaluation:**

A. Testing Procedures:

Exams will comprise 40% of the final grade. Two exams will be given during the course of the semester. Dates will be announced in class and each exam will count 200 points of the final grade. There will be no make-up tests unless prior arrangements have been made with the instructor.

B. Laboratory Expectations:

Lab assignments will be made during the course of the semester. A late penalty will be imposed on any overdue assignment. Failure to satisfactorily complete all labs may result in a grade of F in the course. Labs will count 100 points (10%) of the final grade.

C. Field Work:

N/A

D. Other Evaluation Methods:

1. Individual Project:
One project consisting of a case study based upon individual student interests will be assigned. This project is intended to familiarize students with the basic Active Directory design. Failure to satisfactorily complete the individual project will result in a grade of F for the course. This project will count 250 points (25%) of the final grade. A portion of the project grade will be
determined by peer evaluation.

2. Group Project:
One extensive group project will be assigned to create a complete Active Directory plan for a local business based upon instructor specifications. This project is intended to familiarize students with more advanced Active Directory features. It also provides an opportunity for participating in a group application development and integration effort. Failure to satisfactorily complete the group project may result in a grade of F for the course. This project will count 250 points (25%) of the final grade. A portion of the project grade will be determined by class peer evaluation and another portion by project group peer evaluation.

E. Grading Scale:

- 900 - 1000 A
- 800 - 899 B
- 700 - 799 C
- 600 - 699 D
- Below 600 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.

B. Academic Dishonesty:

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