I. Description of Course:

1. Department/Course: CNET - 165C
2. Title: Administering Security for Windows 2003
3. Cross Reference:
4. Units: 2
   Lec Hrs: 1.5
   Lab Hrs: 1.5
5. Repeatability: Yes Times:3
6. Grade Options: Letter Grade, May Petition Credit/No Credit (GC)

II. Student Learning Outcomes
The student will:

1. Implement, manage, and troubleshoot Windows 2003 Server security policies by doing the following: configuring, deploying, and troubleshooting security templates; and configure additional security based on computer roles.
2. Implement, manage, and troubleshoot patch management infrastructure by: planning the deployment of service packs and hotfixes; assessing the current status of service packs and hotfixes; and deploying service packs and hotfixes.
3. Implement, manage, and troubleshoot security for network communications including: planning IPSec deployment; configuring IPSec policies to secure communication between networks and hosts; deploying and managing IPSec policies; troubleshooting IPSec; and...
planning and implementing security for wireless networks.
4. Deploy, manage, and configure SSL certificates, including uses for HTTPS, LDAPS, and wireless networks. Considerations include renewing certificates and obtaining self-issued certificates instead of publicly issued certificates.
5. Configure security for remote access users.
6. Plan, configure, and troubleshoot authentication, authorization, and PKI.

III. Course Outline:
A lab component is integrated throughout the course in the form of hands-on labs associated with each topic. Labs can be completed in the CS open lab.

A. Planning an Authentication Strategy
   1. Background: Understanding Active Directory
   2. Understanding the Components of an Authentication Model.
   3. Planning and Implementing an Authentication Strategy
   4. Configuring Authentication for Web Users
   5. Creating Trusts in Windows Server 2003

B. Planning and Configuring an Authorization Strategy
   1. Understanding Authorization
   2. Assigning Permissions
   4. Understanding Domain Functional Levels
   5. Using Local Groups
   7. Planning, Implementing, and Maintaining an Authorization Strategy
   8. Troubleshooting Authorization Problems

C. Deploying and Troubleshooting Security Templates
   1. Introducing Security Templates
2. Working With Security Templates

3. Deploying Security Templates

4. Troubleshooting Security Templates

5. Troubleshooting Problems with Applying Group Policy

6. Troubleshooting Unexpected Security Settings

7. Troubleshooting System Policy

D. Hardening Computers for Specific Roles

1. Tuning Security for Client Roles

2. Tuning Security for Server Roles

E. Planning an Update Management Infrastructure

1. Fundamentals of Update Management

2. Designing an Update Management Infrastructure.

3. Defining an Update Process

F. Deploying an Update Management Infrastructure

1. Analyzing Security Configurations

2. Deploying Updates on New Clients

3. Deploying Updates on Existing Clients.

G. Installing, Configuring, and Managing Certification Services

1. Managing Certificate Templates

2. Deploying and Revoking Certificates

3. Archiving and Recovering Certificates

H. Planning and Configuring IPSec
1. Understanding IPSec Fundamentals

2. Planning an IPSec Infrastructure

3. Configuring IPSec.

I. Deploying and Troubleshooting IPSec

1. Deploying IPSec

2. Monitoring IPSec

3. Troubleshooting IPSec.

J. Planning and Implementing Security for Wireless Networks

1. Wireless Network Security Fundamentals

2. Configuring Wireless Security

K. Deploying, Configuring, and Managing SSL Certificates

1. Secure Sockets Layer Overview

2. Configuring SSL for Internet Information Services

3. Other SSL Applications

L. Securing Remote Access

1. Understanding Remote Access Fundamentals

2. Configuring Remote Access Servers


IV. **Course Assignments:**

   A. **Reading Assignments**
      1. Online and textbook reading assignments
   B. **Projects, Activities, and other Assignments**
      1. Hands-on labs and case-scenarios,
   C. **Writing Assignments**

V. **Methods of Evaluation/Assessment:**
A. Objective tests
B. Performance-based skills assessments

VI. **Methods of Instruction:**
   A. Lecture
   B. Laboratory
   C. Demonstration

VII. **Textbooks:**
   **Required**

   **Optional**

VIII. **Supplies:**

   CID 1975