NWAT 2684: Server & Desktop Security

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 2
Lab Hours/Week: 2
OJT Hours/Week: *.*

Prerequisites:
This course requires the following prerequisite
   NWAT 2681 - Fundamentals of Security

Corequisites: None

MnTC Goals: None

This course covers Windows Server and Windows desktop operating systems security issues. Students will learn how to install and configure basic and intermediate security features that can be implemented in a server-client environment. Emphasis will be placed on securing network remote access, standalone and domain security options, group policy administration, file and folder access/encryption, client login controls and restrictions, operating system updates and backup/restore procedures. Additional attention will focus on basic Linux security. (Prerequisites: NWAT1601, NWAT1602, and NWAT1641) (Prerequisite or concurrent: NWAT1649) (3 credits: 2 lecture/1 lab)

B. COURSE EFFECTIVE DATES: 10/10/2005 - Present

C. OUTLINE OF MAJOR CONTENT AREAS
D. LEARNING OUTCOMES (General)
1. Identify internal security risks
2. Identify external security risks
3. Identify business security models
4. Identify corporate security goals
5. Identify current security environment
6. Explain user authentication
7. Explain Kerberos authentication
8. Define accessing resources
9. Explain access control lists
10. Configure access control lists
11. Configure share permissions
12. Configure NTFS permissions
13. Describe EFS (encryption file system)
14. Install EFS
15. Configure EFS
16. Describe printer security
17. Configure printer security
18. Define audit policies
19. Configure audit policies
20. Explain Active Directory (AD)
21. Identify AD security components
22. Describe AD security techniques
23. Configure AD account policies
24. Configure AD security group policies
25. Explain Public Key Infrastructure (PKI)
26. Install PKI
27. Configure PKI
28. Explain Windows server certificate
29. Install Windows server certificate
30. Configure Windows server certificate
31. Describe DNS
32. Configure DNS security
33. Describe DHCP
34. Configure DHCP security
35. Explain Terminal Services
36. Install Terminal Services
37. Configure Terminal Services security
38. Describe SMB signing
39. Configure SMB signing
40. Configure IP security
41. Display workplace professionalism
42. Identify IPSec modes
43. Configure IPSec
44. Configure routing and remote access
45. Define remote access policies
46. Configure desktop IE security options
47. Define desktop security
48. Install desktop firewalls
49. Configure desktop firewalls
50. Display interpersonal communication
51. Explain desktop malware
52. Display common sense approach
53. Explain desktop spyware
54. Install desktop spyware
55. Configure desktop spyware utilities
56. Define viruses
57. Install desktop virus programs
58. Configure desktop virus programs
59. Describe email security
60. Configure desktop email security
61. Configure desktop intrusion detection systems

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted