SAN DIEGO COMMUNITY COLLEGE DISTRICT CONTINUING EDUCATION COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

OFSY 631

COURSE TITLE

OPERATING SYSTEMS-MCSE CERT 2

TYPE COURSE

NON-FEE

VOCATIONAL

CATALOG COURSE DESCRIPTION

This course provides students with the knowledge and skills necessary to implement, administer, and troubleshoot desktop operating systems as a member server of a domain in an active directory environment. This course follows Microsoft Official Curriculum and is intended to prepare students to take Microsoft Certified Systems Engineer (MCSE) certification exams. (FT)

LECTURE HOURS

LABORATORY HOURS

60

30

<u>ADVISORY</u>

Operating Systems-MCSE Cert 1.

RECOMMENDED SKILL LEVEL

10th grade reading level; ability to communicate effectively in the English language; knowledge of math concepts at the 10th grade level; basic computer literacy; normal color presentation and above average manual dexterity.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

- Social Responsibility SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
- 2. Effective Communication SDCE students demonstrate effective communication skills.

OPERATING SYSTEMS-MCSE CERT 2 PAGE 2

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

- 3. Critical Thinking SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
- 4. Personal and Professional Development SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

COURSE GOALS

The goals of this class are to prepare the student to pass a MCSE certification examination. Students will learn to install, configure, evaluate and troubleshoot Windows 2000 servers. Students who successfully complete this course will be prepared to take the Microsoft MSCE exam 70-215.

COURSE OBJECTIVES

Upon successful completion of the course, the student will be able to:

- 1. Perform an installation of Windows 2000 Server.
- 2. Perform an installation, configuration, and troubleshoot access to resources.
- 3. Configure and troubleshoot hardware devices and drivers for Windows 2000 server.
- 4. Assess a Windows 2000 Server's performance, reliability, and availability.
- 5. Examine a Windows 2000 Server's storage use.
- 6. Configure and troubleshoot Windows 2000 network connections.
- 7. Appraise Windows 2000 Server security.

SECTION II

COURSE CONTENT AND SCOPE

The following topics may be included in the framework of the course but are not intended as limits on content. The order of presentation and relative emphasis may vary with each instructor.

- 1. Installing Windows 2000 Server (10 Hrs)
 - 1.1. Unattended answer files using Setup Manager
 - 1.2. Automated methods for installation of Windows 2000
- 2. Access to Resources (20 Hrs)
 - 2.1. Installing and configuring network services for interoperability
 - 2.2. Monitoring, configuring, troubleshooting, and control access to printers
 - 2.3. Monitoring, configuring, troubleshooting, and control access to files, folders, and shared folders
 - 2.4. Monitoring, configuring, troubleshooting, and control access to Web sites

OPERATING SYSTEMS-MCSE CERT 2 PAGE 3

COURSE GOALS (CONTINUED)

- 3. Hardware Devices and Drivers (5 Hrs)
 - 3.1. Configuring hardware devices
 - 3.2. Configuring driver signing options
 - 3.3. Updating device drivers
 - 3.4. Troubleshooting problems with hardware
- 4. Systems Performance, Reliability, and Availability (10 Hrs)
 - 4.1. Monitoring and optimizing usage of system resources
 - 4.2. Manage processes
 - 4.3. Optimizing disk performance
 - 4.4. Managing and optimizing availability of system state data and user data
 - 4.5. Recover systems and user data
- 5. Storage Use (10 Hrs)
 - 5.1. Configuring and managing user profiles
 - 5.2. Monitoring, configuring, and troubleshooting disk and volumes
 - 5.3. Configuring data compression
 - 5.4. Monitoring and configuring disk quotas
 - 5.5. Recovering from disk failures
- 6. Windows 2000 Network Connections (15 Hrs)
 - 6.1. Installing, configuring, and troubleshooting shared access
 - 6.2. Installing, configuring, and troubleshooting a virtual private network (VPN)
 - 6.3. Installing, configuring, and troubleshooting network protocols
 - 6.4. Installing and configuring network services
 - 6.5. Installing, configuring, monitoring, and troubleshooting terminal services
 - 6.6. Configuring the properties of a connection
 - 6.7. Installing, configuring, and troubleshooting network adapters and drivers
- 7. Security (20 Hrs)
 - 7.1. Encrypting data on a hard disk by using Encrypting File System (EFS)
 - 7.2. Implementing, configuring, managing, and troubleshooting policies in a Windows 2000 environment
 - 7.3. Implementing, configuring, managing, and troubleshooting auditing
 - 7.4. Implementing, configuring, managing, and troubleshooting local accounts
 - 7.5. Implementing, configuring, managing, and troubleshooting account policy
 - 7.6. Implementing, configuring, managing, and troubleshooting security by using the Security Configuration Tool Set

APPROPRIATE READINGS

Reading assignments may include but are not limited to the following:

- 1. Articles in computer periodicals and pages on the Internet.
- 2. Microsoft Windows 2000, User's reference, Microsoft Corporation.
- 3. MS-DOS User's Reference, Microsoft Corporation.
- 4. Topics from the assigned texts and study guides.
- 5. Articles in computer periodicals such as Windows Source and PC Computing.

OPERATING SYSTEMS-MCSE CERT 2 PAGE 4

WRITING ASSIGNMENTS

Writing assignments may include but are not limited to the following:

- 1. Writing a focus report that describes the installation and configuration of a Windows 2000 Server.
- 2. Writing the steps involved in installing and configuring printers in a Windows 2000 environment.

WRITING ASSIGNMENTS (CONTINUED)

3. Writing a description on how to establish network disaster protection.

OUTSIDE ASSIGNMENTS

Outside assignments may include but are not limited to the following:

- 1. Practice setting up printers in Windows 2000 Server environments.
- 2. Practice installing and configuring Windows 2000 Server hardware devices and drivers.
- 3. Practice managing, configuring, and troubleshooting storage use.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Critical thinking assignments may include, but are not limited to the following:

- 1. Evaluating and critiquing various methods for troubleshooting when users are unable to gain access to disk resources.
- 2. Comparing and contrasting the administration of Windows NT versus Windows 2000.
- 3. Implement a network upgrade to Windows 2000 Server.

EVALUATION

Evaluation methods may include, but are not limited to the following:

- 1. One or more exams including a final exam composed of questions of similar structure, content, and difficulty as the Microsoft certification exam for Installing and Configuring Microsoft Windows 2000 (Exam 70-215).
- 2. Individual and team hands-on computer laboratory assignments that demonstrate practical understanding of Microsoft Official Curriculum and homework assignments that demonstrate an understanding of Microsoft Official Curriculum theory.

METHOD OF INSTRUCTION

Methods of instruction will be determined by each instructor and may include, but are not limited to, computer assisted instruction, audio-visual aids, textbook, handouts, lectures, laboratory, field trips, and assigned reading.

TEXTS AND SUPPLIES

The following textbooks in their most recent versions are required:

Microsoft Official Curriculum, *Installing and Configuring Microsoft Windows 2000 Server*— Course No. 1557 Microsoft Certified Professional Approved Study Guides (Optional)

PREPARED BY	: _ Dea Brite, Nancy Seamster & Cynthia Scott	DATE	10/2/01
REVISED BY: <u>Instructional Services</u> , SLOs added		DATE <u>March 7, 2017</u>	

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100 California Community Colleges, Title 5, Section 55002 Continuing Education Catalog