SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

OFSY 630

COURSE TITLE

OPERATING SYSTEMS-MCSE CERT 1

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 in any network 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

        30   60

ADVISORY

NONE

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

1. 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.

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 course are to prepare the student to take the MCSE certification exam 70-210
and to meet the prerequisite for Operating Systems-MCSE Cert 2. Students will learn to
interpret technical terms used in information systems technology and to administer, configure,
install and troubleshoot Microsoft Windows 2000 Professional.

COURSE OBJECTIVES

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

1. Perform an installation of Windows 2000 Professional.
2. Implement and conduct administration of resources.
3. Implement, manage, and troubleshoot hardware devices and drivers.
4. Evaluate systems performance and reliability.
5. Configure and troubleshoot the desktop environment.
6. Implement, manage, and troubleshoot network protocols and services.
7. Implement, monitor and troubleshoot 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. Windows 2000 Professional Installation (15 Hrs)
    1.1. Installation using Windows 2000 Server Remote Installation Services (RIS)
    1.2. Installation using Systems Preparation Tool
    1.3. Creating unattended answer files by using Setup Manager to automate the
          installation of Windows 2000 Professional
    1.4. Upgrading from a previous version of Windows to Windows 2000 Professional
    1.5. Deploying service packs
    1.6. Troubleshooting failed installations
2. Administration of Resources (10 Hrs)
    2.1. Monitoring, managing and troubleshooting access to files and folders

COURSE CONTENT AND SCOPE (CONTINUED)

    2.2.   Managing and troubleshooting access to shared folders
    2.3.   Connecting to local and network print devices
    2.4.   Configuring and managing file systems

3.   Hardware Devices and Drivers (10 Hrs)
    3.1.   Implementing, managing and troubleshooting disk devices
    3.2.   Implementing, managing and troubleshooting display devices
    3.3.   Implementing, managing and troubleshooting input and output (I/O) devices
    3.4.   Updating drivers
    3.5.   Monitoring and configuring multiple processing units
    3.6.   Installing, configuring and troubleshooting network adapters

4.   System Performance and Reliability (20 Hrs)
    4.1.   Managing and troubleshooting driver signing
    4.2.   Configuring, managing and troubleshooting the task scheduler
    4.3.   Managing and troubleshooting the use of synchronization of offline files
    4.4.   Optimizing and troubleshooting performance of the Windows 2000 Professional desktop
    4.5.   Managing hardware profiles
    4.6.   Recovering system and user data

5.   The Desktop Environment (10 Hrs)
    5.1.   Configuring and managing user profiles
    5.2.   Configuring support for multiple languages or multiple locations
    5.3.   Installing applications by using Windows Installer packages
    5.4.   Configuring and troubleshooting desktop settings
    5.5.   Configuring and troubleshooting fax support
    5.6.   Configuring and troubleshooting accessibility services

6.   Network Protocols and Services (15 Hrs)
    6.1.   Configuring and troubleshooting TCP/IP protocol
    6.2.   Connecting to computers by using dial-up networking
    6.3.   Connecting to shared resources on a Microsoft Network

7.   Security (10 Hrs)
    7.1.   Encrypting data on a hard disk by using Encrypting File Systems (EFS).
    7.2.   Implementing, configuring, managing, and troubleshooting local group policy
    7.3.   Implementing, configuring, managing, and troubleshooting local user accounts
    7.4.   Implementing, configuring, managing, and troubleshooting local user authentication
    7.5.   Implementing, configuring, managing, and troubleshooting a security configuration

APPROPRIATE READINGS

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

1.   Read current articles in computer periodicals and pages on the Internet.
2.   On-line Microsoft training information.
3.   Read articles in computer periodicals such as *Windows Source and PC Computing*.
4.   Topics from the assigned texts and study guides.
5.   *Microsoft Windows 2000, User's Reference*, Microsoft Corporation.
6.   *MS-DOS User's Reference*, Microsoft Corporation.

WRITING ASSIGNMENTS

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

1. Writing a summary describing how different levels of network access privileges are assigned.
2. Writing a statement describing which device would be used to enable communications between dissimilar LANs that use different protocols.

WRITING ASSIGNMENTS (CONTINUED)

3. Writing project describing the limitations of what NDIS and Novell ODI are designed to overcome.

OUTSIDE ASSIGNMENTS

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

1. Practice Windows 2000 Professional installation.
2. Practice troubleshooting common network problems.
3. Practice configuring and troubleshooting the TCP/IP protocol.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

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

1. Evaluating and critiquing the differences between Windows NT and Windows 2000 Professional.
2. Evaluate and critique the use of network protocols and services.
3. Compare dial-up networking connections in the Windows NT environment to the Windows 2000 Professional environment.

EVALUATION

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

1. Exams composed of questions of similar structure, content, and difficulty as the Microsoft Certification exam 70-210 for administering Microsoft Windows 2000.
2. Individual and/or team hands-on computer lab exercises that demonstrate practical understanding of Microsoft Official Curriculum, and outside assignments that demonstrate understanding of Microsoft Official Curriculum.
3. Individual or team integrative project that demonstrates mastery of multiple topics of the Microsoft Official Curriculum.

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-Course 1557: *Installing and Configuring Microsoft Windows 2000-Self-Paced Training Kit*, Microsoft Corporation, Redmond, WA
Microsoft Certified Professional Approved Study Guides (Optional)

PREPARED BY: Dea Brite, Nancy Seamster & Cynthia Scott   DATE   10/2/01

REVISED BY: Instructional Services, SLOs added   DATE March 7, 2017

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