

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

OFSY 525

COURSE TITLE

DISK OPERATING SYSTEMS

ALTERNATE TITLE

OVERVIEW OF OPERATING
SYSTEMS

TYPE COURSE

NON-FEE

VOCATIONAL

CATALOG COURSE DESCRIPTION

This course builds basic computer and file management skills. Instruction includes microcomputer systems, input and output devices, storage devices and how to manage hardware and software, using operating systems utilities. Topics include booting, disk formatting and partitioning, printer configuration, naming files, listing and managing directories and subdirectories, using text editor, writing and editing simple batch files, file protection. (FT)

LECTURE/LABORATORY HOURS

24

ADVISORY

NONE

RECOMMENDED SKILL LEVEL

Eighth grade reading level, ability to communicate effectively in the English language.

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

To present terminology, principles, and procedures of the discipline; to demonstrate how computers are used in today's business environments; to define a computer and its major functions; to present a hands-on approach to computer and file management procedures using the operating system; to provide the potential for enhanced academic and communication skills and the opportunity to perform in a group setting, enabling students to perform computer management tasks with a business-like approach to the subject; to facilitate independent and team problem solving so that students may successfully interact with employers, co-workers, and the public; to provide students with instruction in common business practices, ethics and integrity; to introduce and relate training to career opportunities in computer related areas.

COURSE OBJECTIVES

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

1. Describe a computer and its major functions, the hardware components, common input/output devices and memory.
2. Use the language of computer technology correctly.
3. Use operating systems utilities to perform computer related tasks and maintenance.
4. Manage disks and manipulate memory, partition a drive, format a partition, prepare a boot disk, back up drive/disk, and describe the various methods.
5. Demonstrate an understanding of directories, subdirectories and file maintenance.
6. Create and edit text files and create, edit and execute simple batch files.
7. Identify problems in desktop security and implement a plan of action for solving problems (virus checking or scanning disks).

SECTION II

COURSE CONTENT AND SCOPE

All topics of the course contain the following:

System Description
Theory of Operation
Component Function
Trouble Shooting Procedures

COURSE CONTENT AND SCOPE (CONTINUED)

Related Terminology

1. System Components
 - 1.1. Hardware components
 - 1.1.1. System unit
 - 1.1.1.1. Mother board
 - 1.1.1.2. CPU
 - 1.1.1.3. Random access memory (RAM)
 - 1.1.1.4. Read-only memory (ROM)
 - 1.1.1.5. Power supply
 - 1.1.1.6. Networks
 - 1.1.2. Input Devices
 - 1.1.2.1. Keyboard
 - 1.1.2.2. Mouse and trackball
 - 1.1.2.3. Modems
 - 1.1.2.4. Scanners
 - 1.1.3. Output devices
 - 1.1.3.1. Monitors
 - 1.1.3.2. Printers
 - 1.1.3.3. Modems
 - 1.1.4. Storage devices
 - 1.1.4.1. Floppy disks
 - 1.1.4.2. Hard drives
 - 1.1.4.3. Magnetic tape drive
 - 1.1.4.4. USB storage devices
 2. Ethics in the Computerized Workplace
 - 2.1. Application and file copyright laws
 - 2.2. Virus and spyware prevention
 3. DOS Commands
 - 3.1. Pars of a DOS command
 - 3.1.1. Parameters
 - 3.1.2. Switches
 - 3.1.3. Pipes and filters
 - 3.2. Internal commands (command.com)
 - 3.3. External commands
 - 3.4. Default disk drive
 4. Disks and Disk Drives
 - 4.1. Hard drive
 - 4.2. Floppy disk drive
 - 4.3. Diskettes
 - 4.3.1. Care of diskettes
 - 4.3.1.1. Formatting floppy disks
 - 4.3.1.2. Copying floppy disks
 - 4.3.1.3. Protecting disks
 - 4.3.2. Managing files
 - 4.3.2.1. Understanding file types
 - 4.3.2.2. File naming conventions

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- 4.3.2.3. Using wild cards
- 4.3.2.4. Saving, copying, renaming files
- 4.3.2.5. Deleting and un-deleting files
- 4.3.2.6. Printing files
- 4.3.2.7. Understanding file attributes
- 5. The DOS Shell
 - 5.1. Starting and using the shell
 - 5.2. Running DOS commands from the shell
- 6. Directories
 - 6.1. Working with subdirectories
 - 6.2. Beginning with the root directory
 - 6.3. Using PATH name expressions
 - 6.4. Changing, making and removing a directory
 - 6.5. Renaming and moving a directory
 - 6.6. Moving and copying files between directories
- 7. The DOS Editor
 - 7.1. Creating and saving text files
 - 7.2. Editing a text file
 - 7.3. Printing a text file
 - 7.4. Batch files
 - 7.4.1. Creating a batch file
 - 7.4.2. Using commands in a batch file
 - 7.4.3. pausing the display for input
 - 7.4.4. using replaceable parameters in a batch file
- 8. Backing Up and Checking Drives
 - 8.1. Using the back up commands
 - 8.2. Performing different types of backup
 - 8.3. Restoring files
 - 8.4. Checking and repairing sectors of a disk
 - 8.5. Using de-fragmentation to improve performance of a disk
 - 8.6. Removing and protecting against a computer virus

APPROPRIATE READING

Appropriate readings may include, but are not limited to, textbooks, workbooks, instructor written handouts, resource manuals, videos, tutorials, on-line assistance and relevant industry periodicals.

WRITING ASSIGNMENTS

Appropriate assignments may include, but are not limited to, completing assigned exercises and reports, maintaining a notebook or portfolio of class assignments and projects, providing written answers to assigned textbook questions and performing the functions of operating systems for command processing and file management as assigned. Writing assignments will enable the students to demonstrate understanding of computers and disk operation systems and application of proper writing skills.

OUTSIDE ASSIGNMENTS

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Students are expected to spend a minimum of two hours per day outside of class in practice and preparation for each day in class. Outside assignments may include, but not be limited to:

1. Reviewing tutorials related to disk operations.
2. Analyzing and providing written responses to designated assignments.
3. Volunteering for course related projects.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments that demonstrate critical thinking may include, but are not limited to, written and oral analysis of reading assignments, evaluation of readings and/or classroom projects and evaluation of end results in assigned exercises.

EVALUATION

A student's grade will be based on multiple measures of performance. The assessment will measure development of independent critical thinking skills and will include evaluation of the student's ability to:

1. Use appropriate operating systems tasks or procedures, tools or equipment, including computer components.
2. Successfully complete assigned hands-on projects and tests.
3. Complete performance objectives.
4. Participate in class activities, as an individual and as a part of a team.
5. Demonstrate reliable attendance and punctuality.

Upon successful completion of each individual course a Certificate of Course Completion will be issued. Upon successful completion of all courses included in the program a Certificate of Program Completion will be issued.

METHOD OF INSTRUCTION

Method of instruction may include, but not be limited to, lecture/discussion, computer assisted instruction, lab, multimedia materials, field trips and any other unique instructional strategies as determined by each instructor.

TEXT AND SUPPLIES

Texts must be current and relevant to the course such as:

Guide to Operating Systems, Course Technology, latest edition

Supplies:

Storage media (i.e. a zip disk, flash or thumbnail drive)

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PREPARED BY Office Systems Professors DATE April 21, 1987

REVISED BY Marcy Schroeder DATE September 15, 1989

REVISED BY Carol Everette DATE August 24, 1995

REVISED BY Don Aragon and Maria Reyes DATE February 17, 2007

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