

COURSE OUTLINE

CMSY-219

Microcomputer Operating Systems--DOS

3 Semester Hours

HOWARD COMMUNITY COLLEGE

Description

In this course, students will examine the operation of the system software of a microcomputer (Disk Operating System or DOS). The student will be able to use the system commands to create and alter the microcomputer environment. The goal of this course is to familiarize each student with the operating system software, define the role of the software, and to train each student in the proper use of the operating system software. DOS versions including 3.x, 5.0 and 6.0 will be referenced. Prerequisite: CMSY-110 or CADD-101. (2 hours lecture, 3 hours lab)

Overall Course Objectives

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

1. Identify and describe the purpose and parts of an operating system.
2. Describe how the Disk Operating System starts.
3. Describe disk storage mechanism, FAT and file tables.
4. Use the operating system utilities EDIT and memory managers.
5. Use selected DOS internal and external commands.
6. Create and document batch files, including advanced batch programming commands.
7. Create and document menu systems.
8. Organize and maintain a hard disk.
9. Develop and document a model stand-alone PC environment for a business.
10. Use documentation (on-screen help and print) to learn additional function and features of operating systems.

Major Topics

- A. Definition, Purpose, History of Operating Systems
- B. Parts of a Typical Microcomputer Configuration
- C. Start-up Procedures for DOS, Default Drive, Directories, Tree Structure, Shift-PrintScreen and Control-PrintScreen, Shut-Down Procedures for DOS, Menu Processing and Buffers
- D. DOS Command Syntax and Types of Commands: Internal, External, Configuration, Batch, Filter
- E. Basic DOS Commands - FORMAT, DIR, COPY, MD, RD, CD, PROMPT, PATH, DATE, TIME, TYPE, DEL, FC and COMP, REN, LABEL, DISKCOPY, DISKCOMP, CHKDSK, VER, CLS, TREE, XCOPY, DOSKEY, VOL, HELP

- F. Files, File Specifications < drive> < path> Filename.< ext> , Global Characters
- G. EDIT
- H. Batch File Commands - CALL, ECHO, FOR, GOTO, IF, PAUSE, REM, SHIFT
- I. Creating Menus
- J. Advanced DOS Commands - SET, ATTRIB, SYS, BACKUP, RESTORE, SUBST, RECOVER, PRINT, MODE, UNDELETE, VERIFY, SHARE, BUFFERS, FILES, LASTDRIVE, DEVICE, ANSI.SYS
- K. FILTERS - FIND, SORT, MORE, PIPE and Redirection Operators < , > , > >
- L. Disk Details - Care, Parts of a Disk Drive, Parts of a Diskette, FATs
- M. CONFIG.SYS, AUTOEXEC.BAT
- N. DOS MEMORY

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

Exams will be given in the computer lab and will include both written questions and performance of tasks on the computer.

Labs/Projects will be assigned that will be worked on during lab periods and completed outside of class time. Students may use the HCC Open Computer Lab or any microcomputer (personal or business) that has appropriate operating system.

Writing: Writing for technical documentation will be emphasized. Periodically students will write in class as a means to learn, to review, or to integrate information. Documentation included in batch files, menus and projects is intended to communicate to a specific audience and meet a minimum standard of proficiency.

Other Course Information

This course is a Business Elective.