

COURSE OUTLINE
CMSY-219
Microcomputer Operating Systems
3 Credits

HOWARD COMMUNITY COLLEGE

Description

In this course, students will examine the operation of the system software of a microcomputer (Microsoft Operating System). 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.

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 Microsoft Operating System starts.
3. Describe disk storage mechanism, FAT and file tables and the relationship to the NTFS file system.
4. Use the operating system utilities: Windows Explorer, Internet Explorer, Control Panel, Windows Task Manager, etc.
5. Use selected Command Line Utility commands (e.g. XCOPY, ATTRIB, SET, etc.).
6. Create and document batch files, including advanced batch programming commands (e.g. IF, GOTO).
7. Develop and document a BACKUP plan for a small business.
8. Use the Registry Editor (REGEDIT)
9. Create documents using linked and embedded documents.
10. Understand the meaning and use of the Current Directory in both a GUI environment and a Command Line Environment.
11. Use documentation (on-screen help and print) to learn additional function and features of operating systems.
12. Understand the basic networking terms used in the operating system.

Major Topics

- I. Definition, purpose, and history of operating systems
- II. Parts of a typical microcomputer configuration
- III. Start-up procedures for an operating system
- IV. Definition and use of key system concepts
 - A. Default drive
 - B. Default directories
 - C. Current directory
 - D. Tree structure
- V. Printing and documentation
 - A. Shift-PrintScreen
 - B. Control-PrintScreen
- VI. Shut-down procedures
- VII. Command line syntax for commonly used commands: DIR, COPY, MD, RD, CD, PATH, TYPE, DEL, REN, LABEL, CLS, TREE, XCOPY, HELP
- VIII. Files and folder specifications

- IX. Global characters (* ?)
- X. Batch file commands: CALL, ECHO, GOTO, IF, PAUSE, REM
- XI. Advanced command line utilities: SET, ATTRIB, FILTERS (FIND, SORT, MORE)
- XII. Piping and redirection operators: <, >, >>, |
- XIII. Disk details - Care, parts of a disk drive, parts of a disk, FATs and NTFS
- XIV. Backing up workstations, servers, and workstations

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include at least 2 exams and 8 labs.

Other Course Information

This course is a Business Elective.