

Course Abstract

If you need accommodations due to a disability, contact Disability Services in Edison Hall Room 100, 732.906.2546.

To foster a productive learning environment, the College requires that all students adhere to the Code of Student Conduct which is published in the college catalog and website.

Course ID and Name: CSC110 – Microcomputer Operating Systems and Architecture

Department: Business and Computer Science

Chairperson or Course Coordinator: Dr. Aslihan Cakmak

Office Location: ED123

E-mail Address: ACakmak@middlesexcc.edu

Telephone: 732-906-2526

Prerequisites: CSC 105 or CSC 106

Co-requisites: None

Course Description:

This course will teach students the role of microcomputer operating systems and how the operating systems interact with the computer. The course covers the structure and function of hardware including input/output devices, memory, central processing unit, storage devices, communications devices and buses. The commonly used microcomputer operating systems Windows and DOS will be discussed and emphasized with hands-on exercises covering topics including: disk maintenance, directory and file management, batch files, interaction of graphical user interface and utilities. Configuration and optimization of standard hardware and system software will also be discussed. Upon successful completion of this course, the student will be prepared to take the associated A+ test.

General Education Status: N/A

Credits: 3

Lecture Hours: 2

Lab Hours: 2

Learning Outcomes:

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

1. Draw and explain the top level block diagram of a computer.
2. Draw and explain the components of central processing unit.
3. List the components and features of an operating system.
4. Configure the Windows operating system.
5. Demonstrate the use of Windows utilities like control panel.
6. List and explain the use of peripheral devices.

Course Content Areas:

- Introduction to Operating Systems
- Computer Security Basics
- Desktop Virtualization
- Windows 7, Windows 8.1, Windows 10
- Supporting and Troubleshooting Window
- OS X on the Desktop
- Linux on the Desktop
- Connecting Desktops and Laptops to Networks
- Operating Systems
- File Management in the Cloud