

COURSE OUTLINE

CMSY-195 Intermediate Visual Basic.NET 3 Semester Hours

HOWARD COMMUNITY COLLEGE

Description

Upon completion of this course, students will be able to incorporate intermediate coding techniques and powerful graphical controls into their Visual Basic projects. Major topics include: programming a database; mouse events, keyboard events and trappable errors; grid controls; object variables and collections; the Multiple Document Interface (MDI); and an introduction to the Windows environment. Prerequisite: CMSY-190. (2 hours lecture, 2 hours lab)

Overall Course Objectives

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

1. A random access file database.
2. Mouse events, including drag and drop and popup menus.
3. Keyboard events and trappable errors.
4. Grid controls for presentation of data in a spreadsheet format.
5. Object variables, intrinsic collections and custom collections.
6. The Multiple Document Interface (MDI).
7. Data Manager, the Data Control and data bound controls.
8. Data Access Objects (DAO) for manipulation of a database.
9. Common Dialog and Graph controls
10. The Windows Clipboard, execution of other programs, and the OLE Control for linking or embedding existing objects.

Major Topics

- I. Programming a database
 - A. Random access files
 - B. Data Manager
 - C. Data Control
 - D. Data bound controls
 - E. Data Access Objects (DAO)
 - F. Crystal Reports

- II. Mouse events, keyboard events and trappable errors
 - A. Sequence of mouse events
 - B. Popup menus
 - C. Drag and drop
 - D. Sequence of keyboard events
 - E. Keystroke trapping
 - F. Err object
 - G. On Error control structures

- III. Grid controls
 - A. Standard grid
 - B. Database grid

- IV. Object variables and collections
 - A. Intrinsic collections
 - B. Custom collections
 - C. Collection properties and methods
 - D. Creating object variables
 - E. For Each structures

- V. Multiple Document Interface (MDI)
 - A. Parent and Child forms
 - B. MDI menus
 - C. New forms at run time

- VI. Introduction to the Windows Environment
 - A. Common Dialog Control
 - B. OLE Control
 - C. Clipboard object
 - D. Execution of other programs

Course Requirements

Grading/exams:

Grading procedures will be determined by the individual faculty member but will include at least 5 programming projects.

Other Course Information

Meets college definition for a Business elective.