

CSC 153 C# Programming

COURSE DESCRIPTION:

Prerequisites: None

Corequisites: None

This course introduces computer programming using the C# programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment at the beginning level.

Course Hours per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

LEARNING OUTCOMES:

Upon completing requirements for this course, the student will be able to:

1. Create a software application using the Microsoft C# programming language.
2. Debug a software application written in the Microsoft C# programming language.
3. Test a software application written in the Microsoft C# programming language.

OUTLINE OF INSTRUCTION:

- I. Introduction to Visual C#
- II. Processing Data
- III. Making Decisions
- IV. Loops, Files and Files
- V. Modularizing Your Code with Methods
- VI. Arrays and Lists
- VII. Text Processing
- VIII. Structures, Enums, Dictionaries
- IX. Classes, Inheritance, Polymorphism
- X. Interfaces
- XI. Delegates, Anonymous Methods
- XII. Language-Integrated Query (LINQ) and Databases

REQUIRED TEXTBOOK AND MATERIAL:

The textbook and other instructional material will be determined by the instructor.