

CSI 1310: Computer Programming

Credits Hours: 4 credits, 3.57 contact hours/week.

Instructor: Laura Dinsmoor, M.S.

Text book: An Introduction to Programming Using Visual Basic, 10th Edition David Schneider
ISBN-13: 978-0-13-452158-9

Specific course information

Algorithmic programming using a high level, event-driven, language such as VB.NET. Topics include data storage and manipulation, graphical user interfaces, control structures, functions and sub procedures.

Prerequisites: MTH 062.

Required course for IT major.

Course Objectives: Upon successful completion of this course, students should be able to

- Develop applications using controls on a form, such as buttons, lists, combo boxes...etc [ABET IT: (a)]
- Create variables and define constants to collect input and program simple arithmetic statements [ABET IT: (a)]
- Develop a skill set to solve problems using a computer, using the program development cycle, the programming tools including flowcharts, the pseudo-code and the hierarchy chart [ABET IT: (a, h)]
- Create Visual Studio programs that demonstrate the use of relational operators, how to control the flow of a program with conditional statements, and implement loops, arrays for data manipulation [ABET IT: (a, h)]
- Create applications with multiple forms, modules and Menus [ABET IT: (a, h)]
- Develop skills on how to save data to sequential text files and then read the data back into application. They will also write programs to implement File Dialog [ABET IT: (a, h)]

List of Topics:

- Visual Studio
- Visual Basic Controls
- Visual Basic Events
- Program Development Cycle, Programming Tools
- Variables, Numbers
- Variables, Strings

- Input and Output
- Relational and Logical Operators
- Select Case Blocks
- Function Procedures
- Sub Procedures
- Passing byVal vs byRef
- List Boxes and Loops
- Creating and Using Arrays
- List Boxes, Multiform programs