COURSE DESCRIPTION

Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSE 1429 or equivalent experiences approved by instructor consent.

A study of C# syntax including data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, windows programming and exception handling.

This is a 4 credit hour course. (3 Lec., 4 Lab.) On-line students should reserve no less than 7 hours per week to complete work.

WECM END-OF-COURSE OUTCOMES: Implement C# classes, objects, and class relationships; develop and write programs applying Object Oriented principles using C#; create member functions using C# syntax and exception handling.

STUDENT LEARNING OUTCOMES:

Upon successful completion of ITSE 1430, students will be able to:

- **Identify** C# terms, syntax, data types, objects, concepts, purposes, control structures, exceptions, classes and arrays.
- **Produce** object-oriented programs utilizing studio development tools that include arrays, strings, regular expressions, class relationships, functions, switches, looping, and exception handling techniques and classes.
- **Reinforce** skills by choosing appropriate data/control structures to apply to C++ programs based on assignment criteria.
- **Demonstrate** knowledge of C# by developing and writing documented programs; designing, debugging and analyzing program code.

COURSE MATERIALS


A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
Major Course Requirements

Students will participate in Discussion Boards addressing topics in each lecture
Students will complete lab exercises which include:

- Examining the basic elements of a C+ program and how to create, build, run and debug an application
- Developing an understanding of the relationship between classes, objects & types, as well as the fundamental predefined types
- Utilizing the steps of software development & exploring different programming methodologies
- Distinguishing between value, ref and out parameters
- Writing C# syntax for programs involving conditional expressions & logical operators, components of a method, If and Switch statements, While for loops, Do while loops and For each loops, string classes, event-handling procedures, list boxes, table controls, combo boxes and radio buttons
- Creating multi-dimensional arrays & dynamic arrays
- Creating Window-based applications

Chapter Quizzes will evaluate the student’s understanding of C# programming concepts and knowledge presented in each chapter.

Subject Matter

Topics covered in the lecture portion of the course include:

- Introduction to Computing and Programming.
- Data Types and Expressions.
- Methods and Behaviors.
- Creating Your Own Classes.
- Making Decisions.
- Repeating Instructions.
- Arrays
- Advanced Collections.
- Windows Programming.
- Programming Based on Events.
- Advanced Object-Oriented Programming Features.
- Debugging and Handling Exceptions.
- Working with Files.
- Database Access Using LINQ and ADO.NET.
- Web-Based Applications.

Disclaimer

The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.
The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

**Policies**
Students should click on the links below and read all of these policies.

- General institutional policies
- Course-related institutional policies