

# C# Programming

## CIS-131 1 F

Spring Term 2021-2022 School Year Section 1 F 3.00 Credits 01/10/2022 to 05/06/2022 Modified 01/03/2022

### Course Description

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Students will build on their knowledge of fundamental programming concepts in this course by developing a variety of business applications using the C# programming language. A higher-level of understanding of methods and event-handlers, arrays and collections, object-oriented programming concepts, and database programming is the desired outcome. Prerequisite: CIS 130

### Outcomes

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#### Course Outcomes

1. Students are expected to write a program for an application that requires the use of a one-dimensional, rectangular, or jagged array, write the code that works with the array.
2. Students are expected to write a program for an application that requires the use of one of the collection classes presented in this chapter, write the code that works with the collection.
3. Given the date and string-handling requirements of an application, students will be able to write the code that satisfies the requirements.
4. Given the specifications for a form that uses any of the controls presented in a chapter, design and code the form.
5. Given the specifications for an application that uses classes with any of the members presented in a chapter, students will develop the application and its classes.
6. Students can develop and use classes that have indexers, delegates, events, and overloaded operators.
7. Use any of the features of inheritance that are presented in this chapter as you develop the classes for your applications.
8. Develop and use your own interfaces.
9. Students are expected to work on the basic components of database applications.

### Additional Outcomes

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### Course Materials

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#### Murach's C# (7th Edition)

Author: Anne Boehm and Joel Murach

Publisher: Murach

Edition: 7th

ISBN: 978-943872-53-4

Availability: Campus Bookstore

### Deliverables

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### Evaluation Procedures and Grading

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## Criteria

***Exams (50% of grade)*** – There will be an online exam for each chapter. Two of the exams will be proctored by your instructor through Microsoft Teams.

Exams will be multiple choice questions. Make-up exams are not available, but arrangements may be made with the instructor to take an exam prior to the scheduled testing time. Students may throw out their lowest exam score (if a test is missed, then the missed test would be thrown out) or choose not to take the last exam if they are satisfied with their grade. Quizzes or short, in-class assignments may be given unannounced, and may not be made up if missed.

***Programming Problems/Lab Assignments (50% of grade)***

- All assignments will be given a due date.
- Due dates will not be changed unless prior arrangements have been made.
- Assignments will be accepted up to 4 days past the due date.
- For each day late, a 10% reduction in the grade for the assignment will be assessed.
- After 4 days late, the assignment has no value.
- Student may receive partial credit for partial solutions.

Since assignments are turned in electronically, being absent from class is not an excuse for turning in an assignment late. Since the mission of Southeast Technical Institute is to educate people for employment in technical careers, it's important that students 'Do the Work!'

## Breakdown

Grades will be earned on a point system, and will be determined by using the following formula:

Points Earned

Deductions Points Possible

A+ = 99 to 100	A = 94 to 98.99	A- = 89.5 to 93.99
B+ = 89 to 89.49	B = 84 to 88.99	B- = 79.5 to 83.99
C+ = 79 to 79.49	C = 74 to 78.99	C- = 69.5 to 73.99
D = 63 to 69.49	D- = 59.5 to 62.99	F = 0 to 59.49

A grade of "C" or higher is required for all CIS programming courses for students majoring in Programming.

## Additional Items

## Course Outline

When	Topic	Notes
Week #1	Appendix A	How to set up Windows for this book
Week #2	Chapter 1~11	Chapters Review
Week #3	Chapter 12	How to create and use classes
Week #4	Chapter 13	How to work with indexers, delegates, events, and operators
Week #5	Chapter 14	How to work with inheritance

When	Topic	Notes
Week #6	Chapter 15	How to work with interfaces and generics
Week #7	Chapter 16	How to organize, document, and test your classes
Week #8	Chapter 17	How to work with file I/O
Week #9	Chapter 18	How to use LINQ
Week #10	Chapter 18	How to use LINQ
Week #11	Chapter 19	An introduction to database programming
Week #12	Chapter 20	How to use Entity Framework Core
Week #13	Chapter 21	How to use ADO.NET to write your own data access code
Week #14	Chapter 22	How to use the DataGridView control