Course Beginning Programming: C# (.NET)

Course Number CS 133 : C# (.NET)

Credits 4

**Instructor** Mari Good

Office Hours I have lab hours scheduled for the last hour of class each and every week. In addition

to those hours, I'm available in my office(room 158) or in the CIT Main Lab (room 135) on Monday and Wednesday from 1 to 2. You may leave an e-mail message at

goodm@lanecc.edu. or contact me via telephone at 541-463-5838.

## **Course Description**

This is the first in a sequence of 3 courses that teaches students to develop desktop applications in the .NET environment. The course introduces students to fundamental programming concepts as well as the syntax of the C# programming language and the Visual Studio development environment.

# **Learning Outcome**

The intention of the course is to enable you to create simple desktop applications for the windows operating system.

## **Course Content**

**Technologies** 

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C#	Visual Studio				

## Themes and Issues

Syntax, semantics and style	Giving and receiving	
	feedback	

**Concepts** 

Programming languages	Compilation and debugging	nd debugging Console applications	
Variables and scope	and scope Operators and expressions Functions		
		return values	
Control structures	Pre-defined objects	Strings	
Arrays			

### Skills

Skuis		
Design, implement and test algorithms.		
Effectively use: variables, operators, functions, control structures, strings and arrays in C#		
programs.		
Effectivelly use the Visual Studio IDE to implement, test and debug C# programs.		
Discuss concepts, themes and issues orally and in writing.		
Evaluate your own programs. Evaluate the programs of other students and provide constructive		
feedback orally and in writing.		
Respond appropriately to and assimilate feedback provided by other students and your		
instructor.		

## **Learning Resources**

#### **Texts**

*C# Fundamentals for Absolute Beginners* is a free video tutorial series by Bob Tabor hosted by the Microsoft Developer Network and is the primary "text" for the course. It is a good introduction to the concepts associated with the creation of console applications in Visual Studio as well syntax of C#. You can find the overview of the set of tutorials at: <a href="http://channel9.msdn.com/Series/C-Fundamentals-for-Absolute-Beginners/01#">http://channel9.msdn.com/Series/C-Fundamentals-for-Absolute-Beginners/01#</a>.

Three online text-based tutorials will also be used throughout the course. Readings and practice exercises will regularly be assigned from each of these sites. The introduction to each can be found at:

- http://www.w3schools.com/cs/cs\_intro.asp
- http://www.tutorialsteacher.com/csharp/csharp-tutorials
- https://www.tutorialspoint.com/csharp/index.htm

#### Web Sites

classes.lanecc.edu will be used to host the web site for the course.

#### Lab

As part of the course, you may choose to work in the CIT Main Lab (building 19 room 135) This is an opportunity for you to gain practical experience with the material in a setting where you can get support and feedback.

# Software

The hardware and software required for the course is available to all students in the CIT Main Lab on campus. You paid a fee when you registered for this course that provides you with unlimited access to CIT lab facilities.

Most students will find it convenient to do at least some of the work for class on a computer off campus. C#, .NET and Visual Studio are Microsoft development technologies and therefore are most commonly used on a Windows computer. As a result of a partnership between Microsoft and many educational institutions, including LCC, students may obtain a copy of the Microsoft software used for the class free of charge. Specifically, you can download a copy of Visual Studio 2017 if you intend to work on your lab assignments at home from <a href="https://aka.ms/vs/15/release/vs\_community.exe">https://aka.ms/vs/15/release/vs\_community.exe</a>. The download and installation process takes about 30 minutes.

#### **Assessment Tasks**

The learning outcomes will be demonstrated by these tasks that progressively build on each other:

- 1. Lab 1 Design, implement and test console application using Visual Studio 2017.
- 2. Lab 2 Design, implement and test programs that get input, do simple calculations and produce output.
- 3. Lab 3 Design, implement and test algorithms written in pseudocode. Design, implement and test programs that make decisions.
- 4. Lab 4 Design, implement and test algorithms written in pseudocode. Design, implement and test programs that use repetition statements.
- 5. Quiz 1 Discuss themes, issues and concepts involved in labs 1 4 orally or electronically with a small group of students. Independently answer matching and short answer "concept" questions. Independently complete C# problems that use syntactical elements introduced in first 4 labs.
- 6. Lab 5 Design, implement and test programs that use programmer defined methods.
- 7. Lab 6 Design, implement and test programs that use strings.
- 8. Lab 7 Design, implement and test programs that use arrays.
- 9. Lab 8 Design, implement and test programs that use all of the concepts and skills that you have developed throughout the term.
- 10. Quiz 2 Discuss themes, issues and concepts involved in labs 5 7 orally or electronically with a small group of students. Independently answer matching and short answer "concept" questions. Independently complete algorithm development problems. Independently complete C# problems that use syntactical elements introduced in first 8 labs.
- 11. Reading Quizzes 1-7 Independently answer matching and short answer concept questions based on the reading from the text each week.
- 12. Programming Quizzes 1-7 Independently answer short answer questions based on the programming syntax introduced each week.

## **Assessment and Grading**

The table below summarizes the possible points for each assessment task as well as the course as a whole:

Assessment Tasks	Points
Labs 1 - 8	160
Reading Quizzes 1 - 8	70
Programming Quizzes 1 – 8	70
Quizzes 1 - 2	120
Course Total	420

Lectures and in-class group activities will cover material in the text as well as supplementary material and are designed specifically to help students master concepts and skills. You can maximize your success in the class by reading the material in the text prior to coming to class and attempting to complete each lab. While students are encouraged to discuss labs and quizzes and to use each other as resources, each student is responsible for his/her own work.

Letter grades for the course will be determined by the following percentages:

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$\boldsymbol{A}$		100 to 92	91 to 90
В	89 to 88	87 to 82	81 to 80
$\boldsymbol{C}$	79 to 78	77 to 72	71 to 70
D	69 to 68	67 to 62	61 to 60
$oldsymbol{F}$	Below 60		

# Accessibility and Accommodations:

To request accommodations contact the Center for Accessible Resources at (541) 463-5150 or AccessibleResources@lanecc.edu

Please be aware that any accessible tables and chairs in this room should remain available for authorized students who find that standard classroom seating is not usable.