CIST 2341 - C# Programming I (version 201003L)

Course Title	Course Development	Learning Support
C# Programming I	Standard	No

Course Description

This course is designed to teach the basic concepts and methods of objected-oriented design and C#.Net programming. Use practical problems to illustrate C#.Net application building techniques and concepts. Develop an understanding of C#.Net vocabulary. Create an understanding of where C#.Net fits in the application development landscape. Create an understanding of the C#.Net Development Environment, Visual Studio and how to develop, debug, and run C#.Net applications using the Visual Studio. Continue to develop student's programming logic skills. Topics include: C#.NET Language History, C#.NET Variable Definitions, C#.NET Control Structures, C#.NET Functions, C#.NET Classes, C#.NET Objects, and C#.NET Graphics.

Pre-requisites

Pre-requisites: One Required

CIST 1305 - Program Design and Development (201003L)

Co-requisites

Co-requisites: None

Course Length

	Minutes	Contact Hour	Semester Credit	WLU
Lecture:	**1500**	**30**		
Lab 2:	**1500**	**30**		
Lab 3:	**2250**	**45**		
Total:	**5250**	**105**	**4**	
Semester Credit Hours:			**4**	**161.25**
Breakout Detail of Lab 3				
Practicum/Internship	**0**	**0**		
Clinical	**0**	**0**		

Competencies & Outcomes

Order	Description	Lecture	Lab 2	Lab 3	Total Min	Credit Hrs	Pract Intern	Clinical
1	**Basic C# .NET Concepts and Visual Studio IDE**	100	100	150	350	0	0	0

Order	Description	Learning Domain	Level of Learning
1	Describe C# .NET and it's benefits	Cognitive	Comprehension
2	Demonstrate the use of the Visual Studio IDE.	Psychomotor	Guided Response
3	Construct a C# program by editing, compiling and testing a C# program using the Visual Studio IDE.	Psychomotor	Complex Response
4	Appreciate the need for a well commented program.	Affective	Valuing

Order	Description	Lecture	Lab 2	Lab 3	Total Min	Credit Hrs	Pract Intern	Clinical
2	**Variables, Data Types, Expressions**	150	150	225	525	0	0	0

Order	Description						Learning Domain	Level of Learning
1	Enumerate the primitive data types.						Cognitive	Knowledge
2	Explain the difference between primitive and reference variables.						Cognitive	Knowledge
3	Construct syntactically correct C# expressions using at least three kinds of operators.						Psychomotor	Complex Response

3	**Decisions and Loops**	250	250	375	875	1	0	0

Order	Description						Learning Domain	Level of Learning
1	Explain what loops are for.						Cognitive	Knowledge
2	Construct at least 3 kinds of working loops.						Psychomotor	Complex Response
3	Explain what decision structures are for.						Cognitive	Knowledge
4	Construct at least 2 kinds of working decision structures.						Psychomotor	Complex Response

4	**C# .NET OO Concepts and Use**	300	300	450	1050	1	0	0

Order	Description						Learning Domain	Level of Learning
1	Describe the concepts of Class, Object, Inheritance, Encapsulation and Polymorphism.						Cognitive	Comprehension
2	Construct a correct UML Class Diagram with at least two classes.						Psychomotor	Complex Response
3	Implement a C# program from a UML Class diagram with at least 2 classes.						Psychomotor	Mechanism
4	Define C# keywords, for example (but not limited to) static, finally, private, public.						Cognitive	Knowledge

5	**C# .NET API**	350	350	525	1225	1	0	0

Order	Description						Learning Domain	Level of Learning
1	Explain what the C# API is and how to look up a Class.						Cognitive	Comprehension
2	Construct a C# program using at least 5 different classes from the C# .NET API.						Psychomotor	Complex Response

6	**C# .NET GUIs**	350	350	525	1225	1	0	0

Order	Description						Learning Domain	Level of Learning
1	Draw a Graphical User Interface using the Visual Studio IDE.						Cognitive	Knowledge
2	Construct a working C# program that uses GUI elements from the .NET toolkit.						Psychomotor	Complex Response

		Lecture 1500	Lab 2 1500	Lab 3 2250	Total Min 5250	Cred Hrs 4	Pract Intern 0	Clinical 0
Competency Totals:								