Community College of Beaver County

MASTER SYLLABUS

Course Name: **Programming in C#** Course Number: **CISW 205**

Lecture Hours:	3
Lab Hours:	0
Credits Hours	3

Prerequisites: CISW 101

I. Course Description

This course introduces the student to computer programming. Using C# based language in a Visual Studio.NET programming environment, students will write programs that run in Console, Web, or Graphical User Interfaces.

II. Objectives

The student will be able to:

- Students will be able to program beginning applications.
- They will be able to install and configure C# within the .NET environment
- Students will be able to use object oriented programming concepts to create simple C# applications.
- They will explain the differences between various Visual Studio.NET development components.
- Students will be able to identify and list data types, methods and classes of beginning C#.
- Students will be able to program in a console, web, or a graphical user interface environment.
- They will be able to specify the necessary structural design for writing C# programs.
- Students will be able to recite necessary components required to make advanced C# programs.

III. Topics to be Covered

- The C# User Interface
- Object Oriented Programming using C#
- Background, History and Evolution of C#
- Three Types of Applications developed using C#
- Data Types and Expressions
- Programs: Data, Variables, Operators and Calculations
- Classes, Methods and Behaviors
- Selections and Decision Structures
- Looping Structures, Logic, Tables,
- Event-driven Programming Structures and Logic

- Midterm Examination
- Arrays, Collections, Matrices and Strings
- Fundamentals of Classes
- Handling Exceptions and Stored Data
- Web Based Applications including IIS
- Polymorphism: Frames, Messages, and Events
- Filing and Printing Containers/Documents
- Data Hierarchy, Files, and Streams
- Database Connections
- Final Examination

IV. Laboratories

N/A

V. Texts:

Simply C#, An Application-Driven Approach, Deitel, H.M., Deitel, P.J., Hoey, T.R., Yaeger, C.H, ISBN 0-13-142641-9, 2004.

VI. Materials and Equipment

A. College owned:
   Computers and Internet access through a LAN
B. Student owned:
   Student owned computer is helpful but, not required

VII. Bibliography

Visual C# .NET Programming: From Problem Analysis to Program Design by Barbara Doyle, ISBN 0-619-15997-9.
The C# Station Tutorial, http://www.csharp-station.com/Tutorial.aspx .
C# Computing Tutorial, http://csharpcomputing.com/Tutorials/TOC.htm .

VIII. Methods of Evaluation

- Regular class attendance is essential for the successful completion of this class.
- Grading is determined by a combination of class participation, programs, assignments, and examinations.
- There will be 2 exams each worth approximately 100 points. Programming and Lab projects and assignments will be graded and included in the final score.
- All assignments and exams must be submitted within the scheduled time. Late assignments and exams will be assessed a 10% penalty.
- All work must be submitted by the final day of the semester.

The final grade will be based on:
TOTAL SCORE/TOTAL POSSIBLE SCORE

90 - 100% A
80 - 89% B
70 - 79% C
60 - 69% D
0 - 59% F

IX. General Education Competency

This assignment meets the specifications of CCBC General Education under Scientific and Quantitative Reasoning.

Scientific and Quantitative Reasoning

Scientific and Quantitative Reasoning employs empirical and mathematical processes and scientific methods in order to arrive at conclusions and make decisions.

- To use scientific methods to analyze existing data or data observed from experiments to formulate and test a hypothesis.
- To compile and interpret mathematical information in a variety of formats including practical applications, estimates, formulas, graphs, and tables.
- To assess the reliability of numerical information using logic and arithmetical and statistical methods and make decisions on their basis.

You will be evaluated on this assignment according to the following rubric. You may use your final exam C# programming project.

Criteria	Level 1 (50-59%)	Level 2 (60-69)	Level 3 (70-79)	Level 4 (80-100)
Technology/software mastery for the project solution	Weak not using technology relevant to directly solving the problem, not efficient	Chose few appropriate technology tools or features for solving the problem with some inefficiency	Chose and apply many of the skills, tools and features with little inefficiency	Exceptional technology selection that most easily and directly arrives at the method to solve the problem
Content of the project	Incomplete or poorly organized with inaccuracies or inappropriate content that does not solve the problem	A solution with some accurate results but is not a complete solution with some poorly organized material with distracting errors	Good results from a solution that is organized with a solution that meets almost all the needs of audience any errors are not distracting	Results form a clear well organized solution to the problem that is accurate and appropriate to the audience with no errors in spelling, grammar or style.
Use of Formulas in C# programming language	Poorly designed, not organized, error-containing, and unstructured presentation	Includes formulas with a few structural elements, mathematical theory inappropriate for the programming project	Many formula elements present but inconsistent use of mathematical application	Efficient, well-organized, appropriate use of formulas within a C# program

Format and Layout of the output of the project	Format and layout does not communicate ideas. Missing layout/format features. Uses some features excessively causing distraction	Applies some format and layout that communicates ideas to clarify function, relationships or importance. Some distractions with overuse of some functions	Applies appropriate format/layout features to most elements with minor overuse of some features but are not serious to the appearance of the solution	Format and layout are excellently arranged to communicate information and ideas, clarify function, illustrate relationships and indicate relative importance
Process for solving the project solution	Does not use and organized approach to solve the problem.	The approach has some organization but is insufficient for creating a quality solution.	Demonstrates a solution that has an organized approach with organization throughout the approach to the solution	Use of an approach that uses planning, development, self-assessment, revision and reflection

X. Statement on Academic Dishonesty

Academic dishonesty occurs when a student represents words or ideas as their own, shares exam questions or answers with others without the instructor's permission, or presents an artifact produced by another (whether hand-made or computer generated) as their own. Academic dishonesty also occurs when a student assists another student in pursuing the above activities. Further information about academic dishonesty, including penalties, is included in the student handbook.

XI. Attendance Policy

The course ascribes to the attendance statement found in the college catalog.

Refund Policy of CCBC

Students withdrawing are eligible for tuition refunds as follows:

100% refund prior to completion of 20% of the total number of weeks designated for the semester session.
No refund after completion of 20% of the weeks designated for the semester session.
100% refund if class is canceled by the College.
Refer to the Academic Calendar on the College website for the specific completion dates for tuition refund.

Dates approved by:

_____ Curriculum Committee

_____ Academic Council

_____ President

Signature Approval of:

_____
Division Director Date

_____
VP Academic Services Date

Revisions:		
	Lorraine Rorick	November 2006
	Academic Dishonesty Statement	July 2007
	Lorraine Rorick Portfolio Update	September 2009
	New Refund Policy	August 2010
	ACT335/Lorraine Rorick	December 2010
	Gen Ed Competency	June 2013
	New Refund Policy	July 2013