

## CUMBERLAND COUNTY COLLEGE

Course: CS 215 Visual Basic Programming

Credits: 4

Prerequisites: CS 112 or permission of the instructor.

Description:

Introduces the student to the standards and conventions of programming the graphical user interface (GUI). Visual Basic will be utilized to develop GUI design programs and to use simple and array variables, database access, animation, as well as sequential and random file access. In addition, consideration will be given to the use of Visual Basic and the object-oriented programming paradigm.

Learning Outcomes

Upon successful completion of this course, students will be able to:

- Demonstrate understanding of elementary Visual Basic concepts including decisions, loops and arrays.
- Develop Visual Basic programs using classes and objects
- Develop Visual Basic programs using human interface and design principles
- Develop Visual Basic programs to solve assigned application problems.
- Use functions and other features of Visual Basic in programs.

Topical Outline

Overview. An Introduction to Programming.

An Introduction to Visual Basic 2015.

Designing Applications.

Using Variables and Constants.

The Selection Structure.

More on the Selection Structure.

The Repetition Structure.

Sub and Function Procedures.

String Manipulation.

Arrays.

Structures and Sequential Access Files.

Classes and Objects.

Optional Topics, as time permits:

Web Applications.

Working with Access Databases and LINQ.

Access Databases and SQL.

Text:

**Programming with Microsoft® Visual Basic® 2015, 7th Edition**

Diane Zak ; Cengage, 2016; ISBN-13: 9781285860268

Student Assessment

(Assessment may be accomplished through projects, portfolios, exams, presentations and/or papers)

Academic Integrity

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense.

As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Tutoring & Project Assist

If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

**Before Withdrawing From This Course**

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.