UNION COUNTY COLLEGE MASTER COURSE SYLLABUS

COURSE NUMBER & NAME: CST 130 Visual Basic Programming

LECTURE/LAB HOURS: 4 lecture hours per week

CREDITS: 4

PREREQUISITES: ENG 096, MAT 119

COURSE DESCRIPTION:

In this course, students will build computing applications using Visual Basics, an object-oriented, event-driven programming language. Topics include graphical user interface design and implementation, file input and output (I/O), forms menu bars, buttons, dialog and list boxes, array of controls, methods (subroutines), debugging techniques, and error-handling routines.

COURSE LEARNING OUTCOMES:

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

1. Develop basic programming skills.
2. Create Windows applications.
3. Master the syntax of Visual Basic
4. Understand object-oriented, event-driven programming concepts.
5. Solve elementary business type problems using Visual Basic.
6. Learn to code and debug programs in an intelligent, organized manner.

COURSE MATERIALS:

MindTap Programming, 1 term (6 months) Printed Access Card for Zak's Programming with Microsoft Visu

COURSE REQUIREMENTS:

To enforce course objectives, all students in this course will be expected to complete homework assignments, complete programming projects, and successfully complete examinations.
An essential element of this course includes information literacy. “Information Literacy” is the evaluation and assessment of integrated information. An understanding of its ramifications and implications through the critical use of information literacy will be discussed. Students will be able to locate, discern, and effectively use information to solve issues and/or problems.

Union County College does not discriminate and prohibits discrimination, as required by state and/or federal law, in all programs and activities, including employment and access to its career and technical programs.

Experiential Learning:

Students must complete an experiential learning activity that connects course content to career applications. This activity may be a content specific assignment or practical skill that is applied within a course assignment. This assignment supports the general education learning outcomes of scientific/critical thinking and quantitative reasoning; oral and written communication; and information literacy/technological competency.

UNION COUNTY COLLEGE MASTER COURSE SYLLABUS

Americans with Disabilities Act (ADA):
Union County College offers reasonable accommodations and/or services to persons with disabilities. Any student who has a documented disability and wishes to self-identify should contact the Coordinator of Disability Support Services at (908) 709-7164, or email disabilitysvc@ucc.edu. Accommodations are individualized and in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1992. In order to receive accommodations, students must be registered with Disability Support Services. Students should register with the office as soon as possible. Accommodations are not official until the Faculty Accommodations Alert Form(s) are issued from the student to his/her instructor(s).

Family Educational Rights and Privacy Act (FERPA):
The FERPA Statement can be found at https://www.ucc.edu/admissions/the-family-education-rights-and-privacy-act/

EVALUATION METHODS:

Assignments/Homework	20%
Tests	40%
Final Exam	30%
Research Paper	10%

Grading:

A	90 or above	C	70-76
B+	87-89	D+	67-69
B	80-86	D	60-66
C+	77-79	F	below 60

NOTE:
The instructor reserves the right to modify the course requirements, assignments, grading procedures and other related policies as circumstances may dictate.

****STUDENTS WITH PHYSICAL LEARNING DISABILITIES****

Any student with special needs that will affect performance in this class should feel free to make an appointment to talk with the instructor during office hours (or by appointment) or contact the disabilities counselor in the Counseling office on the Cranford Campus.

CLASS SCHEDULE**:**

Week	Topic	Assignments/Readings/Activities
1	Introduction, Syllabus, Programming	Readings. Written Assn.

2	Class 1 – Text boxes, frames, check boxes, option buttons, images, shapes Class 2 – Strings, access keys, tab order, default buttons	Readings. Written Assn
3	Class 1 – Data types, 'Dim' statement, 'Val' function Class 2 – Assignment statement, arithmetic operators, order of evaluation	Readings. Written Assn
4	Class 1 – 'Format' function, Decision statements Class 2 – 'And' and 'Or' logic, using option buttons and check boxes	Readings. Written Assn
5	Class 1 – Creating menus Class 2 – Procedures and reusable routines, 'Exe' files	Readings. Written Assn
6	Class 1 – Test 1 Class 2 – Review test	Readings. Written Assn
7	Class 1 – Using multiple forms Class 2 – 'Show' and 'Hide', Variable scope	Readings. Written Assn
8	Class 1 – List boxes and combo boxes Class 2 – Loops – 'Do' loops, 'For-Next' loops	Test 2: Topics covered in weeks 4-7 Readings. Written Assn
9	Class 1 – String functions: 'Left', 'Right', 'Mid', 'Instr' Class 2 – Arrays, One dimensional - Subscripts	Readings. Written Assn
10	Class 1 – User defined data types Class 2 – Creating totals with arrays	Readings. Written Assn
11	Class 1 – Test 2 Class 2 – Review test 2	Readings. Written Assn
12	Class 1 – Table lookups Class 2 – Object oriented programming	Readings. Written Assn
13	Class 1 – Classes and objects Class 2 – 'Initialize' and 'Terminate' events	Test 3: Topics covered in weeks 8 – 11 Readings. Written Assn
14	Class 1 – Data files – Sequential files Class 2 – 'Input', 'Open', 'Write', 'Close' statements	Presentation of research papers
15	Final Exam	Final Exam

SUGGESTED TEACHING METHODOLOGIES:

a. Lecture, group discussion, presentations, multimedia/technology, projects, experiments, demonstrations, etc.
b. Indication of the percentages or emphasis given to teaching methodologies used will assist faculty members in course preparation and implementation.

EXPERIENTIAL LEARNING ACTIVITIES:

Students must complete an experiential learning activity that connects course content to career applications. This activity may be a content specific assignment or practical skill that is applied within a course assignment. This assignment supports the general education learning outcomes of scientific/critical thinking and quantitative reasoning; oral and written communication; and information literacy/technological competency.

CORRELATION OF PROGRAM OUTCOMES, STUDENT OUTCOMES, AND ASSESSMENT

Program Outcomes	Student Learning Outcomes	Assessment of Outcomes
Design, write, and test well-defined, complete, logical programs that meet the defined specifications. Prepare accurate program documentation.	To develop basic programming skills. To create Windows applications. To master the syntax of Visual Basic To understand object-oriented, event-driven programming concepts. To solve elementary business type problems using Visual Basic. To learn to code and debug programs in an intelligent, organized manner.	Programs, tests, paper

REVISED: SPRING 2019