

Computer Programming

Course Syllabus 2015-2016

COURSE DESCRIPTION

Computer programming is an entry level class that will introduce the visual basic language to the beginning learner. There are many different languages that exist, most of which are extremely complex. By the time you are finished with this two semester course, you should be able to create basic programs and have a better understanding as to how computer programming really works.

COURSE OBJECTIVES

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

- Understand the fundamentals of Microsoft Visual Basic 2008
- Understand and apply graphical user interface design principles
- To emphasize the development cycle when creating application, which mirrors the same approach that professional developers use
- To illustrate well-written and readable programs using a disciplined coding style, including documentation and indentation standards
- To create VB applications that deploy on multiple platforms such as handheld computers, cell phones, Web pages, Windows, and Office environments
- To demonstrate how to implement logic involving sequence, selection, and repetition using VB
- To write useful, well-designed programs for personal computers and handheld computers that solve practical business problems
- To encourage independent study and help those who are working on their own in a distance education environment

REQUIRED TEXT & MATERIALS

Textbook furnished

Visual Basic Program is pre-loaded on classroom computers

EVALUATION CRITERIA

Grades are calculated using Total Points composed of:

Daily work, projects, assessments, participation

Final exams are 20% of the semester grade.

MSD Warren Township Grade Scale

100-92.5=A
92.4-89.5=A-
89.4-86.5=B+
86.4-82.5=B
82.4-79.5=B-
79.4-76.5=C+
76.4-72.5=C
72.4-69.5=C-
69.4-66.5=D+
66.4-62.5=D
62.4-59.5=D-
Below 59.5=F

COURSE OUTLINE

Chapter 1	VB 2010 Introduction to Programming	1. Introduction, History, Basic Understanding
Chapter 2	Program and Graphical User Interface Design (GUI)	1. Basic VB Objects 2. Properties 3. Phase 1 of Development 4. Phase 2 of Development
Chapter 3	Program Design and Coding	1. Additional Properties 2. Adding images 3. Visible/Enable 4. Basic VB Code
Chapter 4	Variables and Arithmetic Operations	1. New objects and their properties 2. Introduction to variables 3. Arithmetic operations
Chapter 5	Decision Structures	1. Radio/Check boxes 2. Raw coding for Radio/Check boxes 3. Introduction to If statements 4. If...Then...Else
Chapter 6	Loop Structures	1. Menu strips and Input boxes 2. Counters and accumulators 3. Loops 4. Nested loops
	VB Final Project Preparation	Develop Multi Form Project
	HTML Final Project	Final Presentations