



Southern Lehigh School District

High School Syllabus

Introduction To Computer Science I School Year 2013-2014

Course Description:

This course explores and develops programming techniques commonly used in event-driven windows programming. This course will cover the basic syntax, logic, and operation of the Visual Basic language. In this course students will create interfaces and applications, set properties, and are fully responsible for writing, implementing, documenting, and evaluating their solutions using the Visual Basic programming language. Students will be responsible for defining problems using prior mathematics, logic, and problem solving skills, writing pseudo code, analyzing data, testing, debugging, and modifying programs in order to solve real world problems.

Course Content:

History of programming language
Machine languages
Assembly Languages
High-Level Languages
Procedural – Oriented/Event-Driven High-Level Languages
OOP Terminology
Introduction To Visual Basic
Starting Visual basic
Creating a New Project
The Visual Basic Environment
Control Properties
Visual Basic Help
Adding Controls to a Form
Sizing, Moving, Deleting Controls
Writing Code
Command Buttons
Printing the code and application
Making an EXE

Required Textbooks and/or Other Reading/Research Materials

Text: *Visual Basic 2008 for Windows, Mobile, Web, Office, and Database Applications.*
Comprehensive Copy write 2009

Course Requirements:

Students will be able to:

Plan an OOED Application in Visual Basic

- Building the Interface
- Add a TextBox Control to a form
- Controlling focus
- Locking A controls
- Coding testing and debugging
- Assigning a value to a property during runtime
- Clear Screen Button
- Visual Basic Equations
- Format Function
- Standard Dialog Boxes

Using Variables and constants

- Declaring a variable
- Storing Data in a variable
- Scope of a variable
- Local Variables
- Global Variables
- Form level variables
- InputDialog Function
- Adding Forms to an application

The selection structure

- Logical Operators
- Select Case statement
- CheckBox Control
- Radio Buttons
- Frames
- Random Number Generation
- The Craps Game
- Loading Pictures

Repetition Structures

- For Loop
- DO While Loop
- Do Until Loop
- Arrays

Grade Components/Assessments:

Grades will be based on

- In class key with me 20%
- In class labs 40%
- In class tests 40%

Each marking period is worth 20% of a student's overall grade. The midterm and final exam are each worth 10% of a student's overall average:

Quarter 1	20%
Quarter 2	20%
Midterm	10%
Quarter 3	20%
Quarter 4	20%
Final	10%

Required Summer Reading/Assignments:

None