Computer Programming 1 - Syllabus

COURSE DESCRIPTION

This is a course in which the students will be introduced to computer science. Basic principles in computer programming will be explored using Scratch, Visual Basic 2010 and Ruby.

TEXT

The text for this course is '*An Introduction to Programming' using Microsoft Visual Basic.net*

GRADING

A student's grade will be based on tests, written assignments, computer projects, and programming quizzes. The grading will be done on a total point's basis. The final grade will be determined by the total amount of points that the student accumulated throughout the marking period.

TESTS

There will be unit tests related to the material that we are working on. The tests will be announced in advance.

WRITTEN ASSIGNMENTS

There will be occasional written assignments. These will be submitted to Schoology and graded based on the number of correct responses. No late work will be accepted. If a student is absent for the assignment he or she is responsible to get the assignment and make sure it is turned in.

COMPUTER PROJECTS

Most of the work in this class will require the use of a computer. There will be a number of programming assignments throughout the semester. The students will be given a time line for each one. If a student is absent, he or she is still responsible in meeting the due date plus the number of days of the absence.

******If students are caught cheating on these assignments, all parties involved will be given a zero. ******



PROGRAMMING QUIZZES

There will be occasional programming quizzes given. These will be short in class programs that must be written without help from classmates. They will include the basic concepts that are being learned.

COURSE OUTLINE

We will be learning programming basics using Visual Basic 2010. Some of the topics we will be working on are:

Unit 1 (Introduction to Computer Science and Programming): This unit will include several in class activities to introduce basic concepts in computer science. It will also include an introduction into programming using Scratch.

Unit 2 (Introduction to Programming using VB): This unit will introduce the students to the basic concepts of computer programming. These include, input, output, variables, conditionals, loops, and strings.

Unit 3 (Loops and Conditionals using VB): This unit will introduce Loops and Conditionals using visual basic. This will lead to the creation of a couple basic games.

Unit 4 (Ruby): This unit will introduce the Ruby Programming language.

LAB PROCEDURES

Since we will be using the computer lab for the entire course, there are a few procedures that must be followed.

1. You must have an acceptable use policy on file in order to use the computers.
2. **Refrain from bringing any food or drink into the lab.**
3. Use only your login and password.
4. Do not share your password with anyone.

***As a part of the Technology Acceptable Use Agreement, students are **not** allowed to use the internet unless it is school related. Students will need to use their school e-mail accounts when transporting work from home. Here is the warning system for this violation.

1st Warning: Verbal reminder
2nd Warning: Student will be asked to log off for the remainder of the class period.
3rd Warning: Student will be reported to the office and put on the step system, which could result in the loss of their ability to log on for the rest of the semester.

Special Features of Course:

- Ability to join a CTSO (BPA / DECA)
- Work Based Learning Opportunity to gain better understanding of the Programming Field
- Leadership Opportunity in CTSO or Coding Club
- Hackathon Registration information
- And MORE!