Course Title:  Beginning Programming I

Course Description:
This course introduces basic programming using Visual Basic and C++. Discover commonalities in programming logic and become familiar with each language from coding and compiling to running and executing.

Course Objectives:
1. Define logic
2. Identify common programming languages and their best uses
3. Code and run simple programs using variables, mathematical operators, and if statements.
4. Add loops and functions, arrays, vectors, and applets in appropriate builds.

Textbook(s):
None

Next Class Possibilities:  Beginning Programming II

Lesson Plan – by week or session
Session 1:  Unit 1: Introducing Programming Logic and Languages
Session 2:  Unit 2: Introduction to Visual Basic; Lessons 1-3
            A First Look at MS Visual Basic
            Forms, Controls and Properties
            Events and Code
Session 3:  Lessons 4-6
            Mathematical Operators
            Exponentiation, Order of Operations, and Error Handling
            Data Types and Variables
Session 4:  Lessons 7-9
            Strings and Decimal Types
            If Statements
            Nested If Statements and Option Buttons
Session 5:  Lessons 10-11
            Do Loops
            For Next Loops and Multiple Forms
Session 6:  Unit 3: Introduction to C++ Lessons 1-3
            Entering, Compiling, and Running a C++ Program
            Variables and Constants
            Math Operations
Session 7:  Lessons 4-5
            How Data Types Affect Calculations
            Strings and the String Class
Session 8:  Lessons 6-7
Input and Output
Building Blocks of Decision Making

Session 9:  Lessons 8-9
Selection Structures
Loops

Session 10: Lessons 10-11
Building Programs with Functions
Passing Data and Using Library Functions