

DESCRIPTION OF COURSE:

(Grade 10, 11, 12) (1 Credit)

(Prerequisite: Course 401)

Students will learn the fundamentals needed to use the computer as a mathematical tool. They will use BASIC in a Windows format to design and implement computer-based solutions to problems in several application areas. Students will learn to flowchart, write, run, and debug computer programs in both languages. They will also learn about the history and functions of a computer. Achievement will be demonstrated through the completion of projects and tests.

REQUIRED TOPICS OF STUDY	SUGGESTED INSTRUCTIONAL TIME	STANDARDS/ ASSESSMENT ANCHORS
1. Computers, Programming, and Windows	7 days	3.7.12
2. Introduction to Visual Basic (The Grand Tour)	8 days	3.7.12
3. Variables, Expressions, and Statements	10 days	3.7.12
4. Decision Making and Looping	10 days	3.7.12
5. Strings and Table Construction	10 days	3.7.12
6. Formatting and Arrays	10 days	3.7.12
7. Graphics	10 days	3.7.12
8. Arrays	10 days	3.8.12
9 File Handling	10 days	3.7.12

INSTRUCTIONAL RESOURCES:

Text, Computers, Moodle Course Management System

Textbook: Using Visual BASIC (Second Edition) (South-Western)

Outside Reading: Humor the Computer