

**BROCKTON PUBLIC SCHOOLS
BROCKTON HIGH SCHOOL
BUSINESS, TECHNOLOGY, AND CAREER DEPARTMENT**

**Business Education Standards
670 & 671 Computer Programming using Visual Basic**

This course is designed to teach students basic concepts and techniques of object-oriented programming using Microsoft Visual Basic. This is an introductory programming course using the Visual Basic language. It does not assume any prior programming experience. Students will use "Scratch™" as a building-block tool to become familiar with programming language and the process of creating animations, games, music, interactive stories. Using software development that focuses more on problem solving to prepare them for the Visual Basic software environment.

Students will learn the three-step process of building any program and create challenging business applications using a graphical environment with an emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.

Students are required to review and sign the BHS Internet Acceptable Use Policy as specified in the BHS Student Handbook. This course has been aligned with the BHS Literacy Goals, the National Council of Teachers of Mathematics (NCTM), the National Business Education Association (NBEA), and the Massachusetts Curriculum Frameworks for Instructional Technology Pre K-12.

NOTE: Advanced Level course supplements with additional "Cases and Places" activities.

ACHIEVEMENT STANDARDS

- Reinforce literacy skills in reading, writing, speaking, and reasoning
- Introduction to "Scratch™"
- Introduction to Visual Basic Programming including application programs, structured programming, and applications software
- Learn the 3 step programming process
- Build an Application
- Learn and understand technical terms associated with the Visual Basic language
- Work with Intrinsic Controls and ActiveX Controls
- Create Multiple Forms, Dialogs, Debugging, and Executables
- Create Menus, Data Controls, Common Dialogs, and General Procedures
- Understand Drag and Drop Events and more complex code structures
- Analyze database management and reporting applications
- Create ActiveX Controls and Distributing Applications

REFERENCE MATERIALS

• **Texts**

Gaddis, Tony, and Kip R. Irvine. *Starting out with Visual Basic 2010*. 5th ed. Boston: Addison-Wesley, 2010. Print.

Shelly, Gary B. *Microsoft Visual Basic 6: Complete Concepts and Techniques*. Cambridge, Mass.: Course Technology, 1999. Print.

• **Websites**

"Scratch - Imagine, Program, Share." *Scratch - Imagine, Program, Share*. Web. 10 Sept. 2015.