

# Computer Applications (Business)

Elective – Semester – 9/10/11/12

Prerequisites: None

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## **Course Description**

This course is designed to give an overview of various career opportunities that exist using popular software programs. Computer Applications will focus on programming using Visual Basic, web page development with various software and 3D modeling with Google SketchUp. Students will be equipped to use their skills both in the world of work and in their congregations to promote the Word of God and show their faith through their projects.

## **Course Goal**

Computers and related technology change rapidly. This course will dynamically change through time to keep pace with current technology and software. Students should complete the course with a better understanding of career opportunities in several computer related fields.

## **Course Objectives**

The student should be able to:

- Apply their knowledge of software to accomplishing specific business and personal projects.
- Understand that technology is a blessing and it is to be used to the glory of God.
- Utilize the Internet as a resource for completing projects, sending E-mail, and communication
- Create a program in Visual Basic using the three step process: creating the user interface, setting properties, and writing the code
- Understand professional website development & techniques
- Develop a working web site
- Create a 3D model with Google SketchUp

## **Course Outline**

- I. Visual Basic
  - A. Building an application
  - B. Working with controls
  - C. Applications with multiple forms and working with the debug window
- II. Website Development
  - A. Elements of a web page
  - B. Graphics
  - C. Printing
  - D. Saving
  - E. Design criteria
  - F. Hyperlinks
  - G. Image maps
  - H. Forms
  - I. Data collection
  - J. Frames
  - K. Final Project
- III. Google SketchUp
  - A. Introduction to drawing objects
  - B. Projects

## **Instructional Strategies**

- Short lectures of instructions, review, or new material usually start each day.
- Students will then be given the opportunity to use a computer individually on a daily basis to proceed with a self-paced tutorial style textbook.
- This enables the student who comprehends material at a faster rate to advance beyond the other students only slowing down where necessary.
- This also allows students having trouble to slow to a pace where comprehension occurs at their speed rather than at the speed of the entire class.
- A minimum pace for the class will be set but a maximum will not. Each student is encouraged to advance as far as possible in the time allotted.

### **Grading**

- Tests and quizzes are taken on-line through the computer network
- Daily projects and a final project that incorporates a collective knowledge of a program to apply many of the skills learned will also be required
- You will be expected to complete work/projects in a timely manner. Due to the nature of the projects, an extension to complete a project may be given if the need warrants it.
- Final semester grades are determined by total points earned over total points possible

### **Student Materials**

- School computer network
- Visual Basic 2008: Complete Concepts and Techniques, Shelly Hoisington, 2009.
- Web Design: Introductory Concepts and Techniques, Shelly Cashman Kosteba, 2014.

### **Classroom Procedures**

Routines – Being self-motivated is a must for successfully completing this course. Taking initiative to solve problems and creating (unique) solutions will be expected.

Tardies – Students must be in the classroom before the bell rings.

Make-up Work – Students have the same number of days to turn in work as they were absent (e.g. gone 3 days = 3 days to make-up work). Late work will have the score reduced. It is encouraged that work be done prior to known absences.