

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

 X Transfer Course X A.A. Degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: CSIS 214 Intermediate Visual Basic

UNIT VALUE: 4

MINIMUM NUMBER OF SEMESTER HOURS: 80

BASIC SKILLS REQUIREMENTS: Appropriate Language and Computational Skills

ENTRANCE REQUIREMENTS

PREREQUISITE: CSIS 117, Introduction to Visual Basic

COREQUISITE: None

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

An intermediate level programming language which provides for building special purpose Windows applications using the Graphical User Interface of Windows. Includes extensive practice using programming logic control structures in designing algorithms and a wide array of Visual Basic objects in implementing the three-step approach to building Windows applications in Visual Basic.

SPECIFIC COURSE OBJECTIVES: The successful student will:

1. Correctly apply Visual Basic application tools.
2. Correctly write applications with multiple forms.
3. Correctly use control arrays.
4. Interface with a database management system.
5. Create and access sequential and random access file types.
6. Design, code and implement single and two dimensional arrays.
7. Locate, implement and code additional ActiveX controls.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Review of Visual Basic Fundamentals
- II. Working with Databases
 - A. How databases store business data
 1. The parts of a database

- 2. Understanding database concepts
- B. Database operations
 - 1. Querying
 - 2. Editing
 - 3. Adding and deleting
- C. Adding the data control to a form
 - 1. Using the Recordset property
- D. Using bound controls to display the contents of database fields
- E. Adding controls to:
 - 1. Browse the database records
 - 2. Add new records
 - 3. Delete existing records
- F. Finding database records with field contents that match a specified value or string
- G. Using SQL commands to work with multiple tables in a database
- III. Programmer-defined Types and Direct Access Files
 - A. Creating programmer-defined data types
 - 1. The Type statement
 - B. Working with record types
 - 1. Storing multiple types of data in a single array
 - 2. Using dot notation
 - a. The With statement
 - C. Using direct access files to store information
 - 1. Kill, Open, Put, and Get statements
 - 2. LEN and LOF functions
- IV. Creating applications with multiple forms
 - A. Adding additional forms and setting their properties
 - B. Writing code for multiple forms
- V. Arrays
 - A. Two dimensional arrays
 - B. Searching arrays
 - C. Sorting arrays
- VI. Additional ActiveX Controls
 - A. Adding ActiveX Controls to the Toolbox
 - 1. TreeView Control
 - 2. ListView Control
 - 3. ImageList Control
 - 4. TabStrip Control
 - 5. ToolBar Control
- VII. Using Mouse Events, Properties and Drag and Drop
 - A.MouseDown
 - B. MouseMove
 - C. MouseUp
 - D. DragOver
 - E. DragDrop
 - F. Line, Circle, PSet
- VIII. Using the common dialog box
 - A. Opening, saving and closing files
 - B. Color Dialog
 - C. Font Dialog
 - D. Printer Dialog
- IX. Making executable files
 - A. Defining the difference between .VBP and .EXE files

- B. Adding and deleting program items
- C. Running the application from a Windows icon

REQUIRED READING:

Zak, Diane. Programming with Microsoft Visual Basic 6.0. Cambridge: Course Technology, 2001.

SUGGESTED READING: None

REQUIRED WRITING:

Students are required to complete the three lessons in each of the ten tutorials in the textbook. Problem solving exercises will be assigned requiring students to complete ten to fifteen computer programming laboratory exercises. Each programming assignment will consist of a hands-on exercise applying theoretical principles learned in class. Programs must be well documented (as least one paragraph) in terms of their overall design goals. Additionally, each sub-program must be documented (two to three sentences) as to its purpose and overall performance.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

Completion of tutorial assignments and laboratory programming assignments. In addition, each student will design a programming project of his or her own choice for completion after obtaining the approval of the project by the instructor.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

DISTANCE LEARNING:

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply:

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)

- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

70-100% Programming assignments
0-30% Examinations

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes No Number of times course may be taken for credit: 1

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable:

CONTACT PERSON: Ronald Burgher, Ext 2760

SIGNATURES ON FILE