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Course Outline for CIS 68

VISUAL BASIC/MICROSOFT APPLIC

Effective: Spring 2014

I. CATALOG DESCRIPTION:
CIS 68 — VISUAL BASIC/MICROSOFT APPLIC — 2.00 units

Visual Basic for Applications, a programming language provided with Microsoft Office suite, provides a common programming language for customizing Microsoft Office applications. With VBA, students will develop customized applications built around the standard Office applications of Word, Excel, PowerPoint, and Access for specific business needs. In this class students will learn how the Microsoft Office suite is related to Visual Basic for Applications (VBA). They will become acquainted with the Visual Basic for Applications Integrated Development Environment (VBA IDE). They will learn to open the VBA IDE in multiple different Office applications. They will also create some simple programs into the VBA IDE and learn how to run those programs. Finally, students will learn how to create and run a macro and view the code created by the macro.

2.00 Units Lecture

Strongly Recommended
CIS 55 - Integrating Office Applications

Grading Methods:
Letter or P/NP

Discipline:

	MIN
Lecture Hours:	36.00
No Unit Value Lab	18.00
Total Hours:	54.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

Before entering this course, it is strongly recommended that the student should be able to:

A. CIS55

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

A. Recognize and identify the specific elements of the Visual Basic for Applications environment
B. Use the integration features of an application program to link and embed objects created in other programs;
C. Demonstrate an understanding of the properties of controls an be able to create controls in a program
D. Use Visual Basic menu design windows feature to create programs
E. Define, recognize, and use variables of various data types in a program
F. Use macros in various Office applications (Word, Excel, Access, PowerPoint) to automate a business task
G. Use VBA system debugging features to find and correct errors in programs
H. Recognize the strengths and weaknesses of the various types of applications in the work environment as presented in this course.

V. CONTENT:
A. Introducing Microsoft Visual Basic for Applications Visual Editor
B. Working with Objects and Properties
C. Using Variables, Assignment Statements, and Control Structures
D. Repeating Statements with Repetition Control Structures
E. Creating a VBA Application for Microsoft Word
F. Using VBA with Excel
G. Creating a PowerPoint VBA Application with Multiple Forms
H. The hands-on use of integrated software elements, such as
    1. Create Macros to automate tasks
    2. Create Excel VBA
    3. Create Word VBA
    4. Create Access VBA
    5. Create PowerPoint VBA

VI. METHODS OF INSTRUCTION:

A. **Demonstration** -
B. Hands-on lab with step-by-step exercises
C. **Discussion** -
D. **Lecture** -
E. Periodic examinations

VII. TYPICAL ASSIGNMENTS:

A. Create Macros to automate tasks 1. Record a Macro 2. Edit a Macro 3. Execute and Test a Macro B. Use VBA Word 1. Modify an active document 2. Change text properties 3. Create and define variables 4. Use data types 5. Use proper naming conventions 6. Use Operators 7. Use VBA statements C. Use VBA Excel 1. Use the Application object 2. Use the Workbook object 3. Create, open, close, Workbook objects 4. Use the Selection, ActiveCell, and Range properties 5. Use error-handling techniques D. Use VBA PowerPoint 1. Create a new PowerPoint presentation 2. Use VBA to manipulate PowerPoint objects 3. Open an existing presentation within Word

VIII. EVALUATION:

A. **Methods**

1. Exams/Tests
2. Quizzes
3. Class Participation
4. Lab Activities
5. Other:
    a. Methods
        1. Quizzes and final examination
            a. Typical questions: Objective
                1. The _____ feature of Microsoft Word allows you to merge variable data into a form letter.
                    1. Mail Merge
                    2. Letter Wizard
                    3. Merge Wizard
                    4. Paste Letter
        2. Graded hands-on lab assignments
        3. Attendance and participation

B. **Frequency**

1. Frequency
    a. Two to four quizzes and a final examination
    b. Weekly hands-on projects to reinforce learning of program functions

IX. TYPICAL TEXTS:

1. Zak *Visual Basic for Applications.*, Course Technology, 2000.
2. Tidwell/Thomas *New Perspectives on Microsoft Office 2000 Visual Basic for Applications – Introductory.*, Course Technology, 2001.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

A. 2-3 IBM-PC Formatted, High Density, 3.5” diskettes
B. Computer Lab Supplies Certificate