San Bernardino Valley College
Curriculum Approved: January 24, 2005

I.   COURSE INFORMATION:
   A. Division: Business & Information Technology
       Department: Computer Information Technology
       Course ID: CIT 150
       Course Title: CIT 150 Office Applications Development
       Units: 3
       Lecture: 2 hours
       Laboratory: 3 hours
       Prerequisite: CIT 101
       Co requisite:
       Dept. Advisory: CIT 102

   B.   Catalog and Schedule Descriptions: An Introduction to Visual Basic for
   Application, Microsoft's common application scripting language for Microsoft office
   applications. Topics include: programming basics; automated formatting of spreadsheet
   and word processor documents; design and construction of customized data entry
   screens for databases. *(formerly MIS 200)*

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

III. EXPECTED OUTCOMES:
   Upon successful completion of the course, the student should be able to:
   A. Use Visual Basic for Applications and the VBA editor
   B. Automate common tasks in Microsoft Office
   C. Create custom data entry forms
   D. Understand basic object oriented programming concepts
   E. Write procedures in Visual Basic for Applications
   F. Execute a Visual Basic for Applications procedure

IV.   COURSE CONTENT:
   A. An overview of Visual Basic for Applications
       1. Visual Basic for Applications.
       2. Properties and modules
       3. The Code Window
       4. The Object Browser
   B. Programming basics
       1. Working with variables and functions
       2. Scope of variables
       3. Scope of procedures
   C. Control structures
       1. Using decision structures
       2. Using loop structures
   D. Forms
       1. Creating a form
       2. Working with forms
       3. Understanding events in a form
       4. Using Controls

    E. Debugging and error handling
1. Errors
2. Debugging
3. Error-handling
    F. Procedures in Word
1. Programming with word objects
2. The document collection
3. The Tables collection
    G. Procedures in Excel
1. Creating custom forms
2. Adding controls to a spreadsheet
3. Excel Objects
    H. Procedures in Access
1. Getting started with ActiveX Data Objects
2. Advanced Queries, and SQL
3. Creating custom reports

V. METHODS OF INSTRUCTION: (Please check all that apply and add any additional not listed.)

X   Lecture
X   Class and/or small group discussion
X   Critical evaluation of texts, newspapers, journal articles, and other printed research
        Critical evaluation of films, videotapes, audiotapes, or other media forms
        Classroom demonstrations
        Field trips
        Guest speakers
X   Other: Writing assignments
X   Other: Data-Show computer display

VI. TYPICAL OUT-OF-CLASS ASSIGNMENTS:

A. <u>Reading Assignment.</u> Reading assignments are required and may include (but are not limited to) the following:
1. Read assigned textbook chapter on calling function procedures. Create a sub function procedure that instructs the user to enter the number of quarterly report desired and calculates the salesAmt and commissionAmt from a table. Add a MsgBox that includes a message to the user identifying which quarter is being calculated and the values.

B. <u>Writing Assignment.</u> Writing assignments are required and may include (but are not limited to) the following:
1. Write a function procedure named RealNPV that calculates the net present value for a project. The function should take three arguments: I) the annual discount rate, II) the range that contains the dates of the cash-flows and III) the range that contains the magnitudes of the cash-flows. Note that the function should work regardless of what time periods the user specifies between the cash-flows (=the time periods between the cash-flows must not necessary be one year).

C. <u>Critical Thinking Assignment.</u> Critical thinking assignments are required and may include (but are not limited to) the following:
1. Analyze design problem
2. Design and construct a Spreadsheet that contains procedures.

VII.   EVALUATION:
A student's grade will be based on multiple measures of performance and will reflect the objectives explained above. A final grade of "C" or better should indicate that the student has the ability to successfully apply the principles and techniques taught in this course. These evaluation methods may include, but are not limited to, the following (Please check all that apply, and add additional ones not listed):

_____ Portfolios
_____ Projects
X___ Written papers or reports
_____ Presentations (oral and visual)
_____ Work performance (internships or field work)
X___ Lab work
X___ Comprehensive examinations (cumulative finals or certifications)
_____ Peer evaluation
_____ Self evaluation
X___ Classroom participation
X___ Homework
_____ Other: BASIC Programs
_____ Other:
_____ Other:

VIII.   TYPICAL TEXTS:

A.   Bates, James. Introduction to Programming Using VBA, Kendall Hunt Publishing Corporation, 2002
B.   Course ILT: Microsoft Word 2003: VBA Programming, Thompson Course Technology, 2004
C.   Course ILT: Microsoft Excel 2003: VBA Programming, Thompson Course Technology, 2004
D.   Jelen, Bill and Syrstad,Tracy. VBA and Macros for Microsoft Excel. Macmillion Computer Publishing, 2004

IX.   OTHER SUPPLIES REQUIRED OF STUDENTS:
A.   Zip disk or any other storage device that holds large amounts of data.