I. Description of Course:

1. Department/Course: CAOT - 145
2. Title: Microsoft Visual Basic for Applications
3. Cross Reference:
4. Units: 3.00
   Lec Hrs: 2.00
   Lab Hrs: 3.00
5. Repeatability: Yes Times: 2
6. Grade Options:
   Letter Grade, May Petition Credit/No Credit (GC)
7. Degree/ Applicability:
   Credit, Not Degree Applicable (C)
8. General Education:
9. CAN Numbers:
10. Field Trips: Not Required
11. Requisites:

12. Catalog Description:
Learn to use Visual Basic for Applications (VBA) to develop customized Windows applications that can be integrated with the Microsoft Office Suite.

13. Class Schedule Description:
Microsoft Office Suite customization using Visual Basic for Applications.

14. Counselor Information:
This course develops the skills for developing custom windows Microsoft Office Suite applications using Visual Basic for Applications. No previous programming knowledge is required, but knowledge of the Microsoft Office suite, Word, Excel, and Access, is essential.

II. Student Learning Outcomes

The student will:
1. Develop customized Windows applications using VBA and MS Office.
2. Manipulate objects in the Object Model of each Office application (Word, Excel, Access and PowerPoint) using VBA.
3. Demonstrate the commonality of VBA across all the MS Office applications.

III. Course Outline:

1. The Visual Basic Editor
2. The Object Model
3. Object Variables
4. String Variables
5. Date Variables
6. Numeric Variables
7. The Selection Structure
8. The Select Case Statement and the MsgBox Function
9. The For...Next, For Each...Next, and With Statements
10. The Do...Loop Statement and String Functions
11. Built-in Dialog Boxes and the Office Assistant
12. Custom Dialog Boxes
13. Option button, Check box, and List Box Controls
14. Automation
15. Error handling

IV. Course Assignments:

Reading Assignments
Assigned reading from the text and material posted on the class web page

Writing Assignments
Projects, Activities, and other Assignments
The student will complete exercises in each of the topics listed in the course outline to demonstrate programming concepts using VBA and to apply these concepts to customize MS Office.

V. Methods of Evaluation:

A. Completion of programming exercises; assessment is based on the documentation and functionality of the programming assignment.
   1. Quizzes: Short questions on topics from text chapters demonstrating comprehension of the reading material.
   2. Exam(s): midterm and final
B. Objective exams on the fundamentals of VBA

Methods of Instruction:
Laboratory
Discussion
Demonstration
Lecture

VI. Textbooks:

Required

Optional

VII. Supplies:

None