Catalog Course Description:

A study of Windows graphic interface development through Visual Basic programming language. The student will use VBA (Visual Basic for Applications) for customizing applications such as Word, Excel, Access, MS Project, Visio, AutoCAD, accounting, and help desk. Topics include VBA programming tools, integrating with Internet and Intranet solutions.

Entry Level Standards:

The entry-level student is expected to have a basic familiarity with computers. The student should be able to use a standard keyboard and maintain 28 words per minute error-free typing rate. The student must have writing, verbal and English language skills at the college entry level.

Prerequisites:

n/a

Corequisites:

CSIT 1110 or consent of the instructor

Textbook(s) and Other Course Materials:

Visual Basic for Applications by Diane Zak, Thomson Learning/Course Technology. ISBN 0-619-00020-1

I. Week/Unit/Topic Basis:
Note: Application Lessons: Excel, Word, and Access will be used each week.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Application and Programming Concepts; Using the Visual Basic Editor</td>
</tr>
<tr>
<td>2</td>
<td>The Object Model; Object Variables</td>
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<tr>
<td>3</td>
<td>String Variables</td>
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<tr>
<td>4</td>
<td>Date Variables; Test 1</td>
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<tr>
<td>5</td>
<td>Numeric Variables</td>
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<tr>
<td>6</td>
<td>Selection Structure</td>
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</tbody>
</table>
II. Course Objectives*:

A. Develop skills in solving problems by using a computer. I, II, III
B. Demonstrate basic fundamentals of Microsoft Windows concepts. III
C. Analyze problems, then design and code Visual BASIC statements to form working graphic-based programs. I, II, III, V, VI, XV
D. Develop, code, debug and modify input/output/control/visual features. V, VI, VII
E. Apply Visual Basic programming skills to develop real world applications in Word, Excel, and Access. VI, X, VI, XII, VIII
F. Understand the syntax and semantics of Visual BASIC programming language. II, III, IV, VI, VII

*Roman numerals after course objectives reference goals of the CSIT program.

III. Instructional Processes*:

Students will:

1. Use Visual BASIC tools to create a well-documented application based on client input or industry research. Communication, Technological Literacy, Transitional Strategy, Active Learning
2. Use professionally accepted methods and materials in completion of applications. Technological Literacy, Transitional Strategy, Active Learning
3. Use graphical interface and animation, and create a link from Visual BASIC project to a web site. Technological Literacy, Active Learning, Mathematics Outcome
4. Use the Internet as a medium for obtaining documentation and instruction, and for submitting assignments. Communication, Technological Literacy, Information Literacy, Transitional Strategy, Active Learning
5. Practice elements of the work ethic such as punctuality, professionalism, dependability, cooperation, and contribution. Social/Behavioral Science Outcome
6. Learn to analyze and solve problems using structured analytical techniques. *Technological Literacy, Active Learning, Mathematics Outcome*

7. Use professional tools to produce software components and documentation. *Technological Literacy, Transitional Strategy, Active Learning*

8. Plan the logic for complete business programs. *Technological Literacy, Active Learning, Mathematics Outcome*

*Strategies and outcomes listed after instructional processes reference TBR's goals for strengthening general education knowledge and skills, connecting course work to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

**IV. Expectations for Student Performance***:

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

1. Recognize basic data types. A, B
2. Use arithmetic, logical and conditional operators. A, B, D
3. Demonstrate the proper use of the editor, window environment and program operation procedures. A, E
4. Identify and properly use the keyboard, mouse and function key set. A, B
5. SAVE and Back-Up all programs developed in the course on their own disk and electronically submit final programs to the instructor as required to meet timelines established. A, B, E
6. Demonstrate working program commands, icons, operators, arguments, variables and controls. B, C, D, E
7. Demonstrate correct program syntax and design. B, C, D, E
8. Demonstrate use of program statements to match logic requirements. B, C, D, E
9. Demonstrate a working knowledge of the Visual Basic program language terms, statements, properties, methods, events, controls, forms and functions. B, C, D, E
10. Debug/refine software and meet all (turn-in) requirements. C, D, E
11. Develop windows which are visually correct and which function according to specifications. B
12. Create fully functioning window driven client-based problem solving programs complete with documentation per instructor specifications. B, C, D, E

*Letters after performance expectations reference the course objectives listed above.

**V. Evaluation**:

A. Testing Procedures:

A minimum of three tests is recommended. Tests will cover material presented in class. Tests are not to be missed without a valid excuse.
B. Laboratory Expectations:

Lab attendance is required. Assignments will be given and must be completed and handed in at the designated date. The student is expected to turn in all required documentation for each lab.

C. Field Work:

n/a

D. Other Evaluation Methods:

Class participation, quizzes and homework will also comprise the final grade for the course.

E. Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93 - 100</td>
</tr>
<tr>
<td>B+</td>
<td>88 - 92</td>
</tr>
<tr>
<td>B</td>
<td>83 - 87</td>
</tr>
<tr>
<td>C+</td>
<td>78 - 82</td>
</tr>
<tr>
<td>C</td>
<td>73 - 77</td>
</tr>
<tr>
<td>D</td>
<td>65 - 72</td>
</tr>
<tr>
<td>F</td>
<td>Below 65</td>
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</tbody>
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VI. Policies:

A. Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. [NOTE: No differentiation is noted for excused/unexcused absences. These will be treated as an absence.] (Pellissippi State Catalog)

B. Academic Dishonesty:

Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions which may be imposed through the regular Pellissippi State procedures as a result of academic misconduct, the instructor has the authority to assign an F or a zero for the exercise or examination or to assign an F in the course. (Pellissippi State Catalog)

C. Accommodations for disabilities:

If you need accommodations because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please inform the instructor immediately. Please see the instructor privately after class or in his/her office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127 or 131 or by phone: 694-6751(Voice/TTY) or 539-7153.

D. Other Policies:

Computer Usage Guidelines:
College-owned or –operated computing resources are provided for use by students of Pellissippi State. All students are responsible for the usage of Pellissippi State’s computing resources in an effective, efficient, ethical and lawful manner. (Pellissippi State Catalog)