

PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

VISUAL BASIC PROGRAMMING
CSIT 2610 (formerly CST 2610)

Class Hours: 3.0

Credit Hours: 4.0

Laboratory Hours: 3.0

Revised: Fall 2005

NOTE: This course is not designed for transfer credit.

Catalog Course Description:

A study of Windows graphic interface development through the learning and hands-on application of Visual BASIC programming language. The learner will develop, design, code and test graphic sessions, images, windows, mouse selections, data usage and image movements to produce client-based working programs. Emphasis will be on code creation, sound programming practice, window control and graphic design. Development of working client-based products is essential to the completion of this course.

Entry Level Standards:

The student must have sufficient math and computer literacy background to analyze problems logically. The student should have previous programming experience and knowledge of Windows and PC usage.

Prerequisite:

One programming course

Corequisite:

College-level math

Textbook(s) and Other Course Materials:

Programming in Visual Basic .NET: Visual BASIC.NET 2005 Edition. by Julia Case Bradley, Anita Millsbaugh. McGraw-Hill.

I. Week/Unit/Topic Basis:

Week	Topic
1	Introduction to VB. NET 2005
2	User Interface Design
3	Variables, Constants, Calculation
4	Decision and Conditions
5	Menus, Common Dialog Boxes, sub procedures and Function Procedures
6	Multiform Projects
7	Lists, loops, and printing

8	Arrays
9	Programming with Visual Web Developer
10	Database Files
11	Data Files
12	Object Oriented Programming
13	Graphics, Animation, Sound, and Drag-and-Drop
14	Addition topics
15	Final Exam Period

II. Course Objectives*:

- A. Operate a window-based microcomputer having keyboard, mouse, disk drives and load, use, control, design, code, test and run programs. I, II, III, IV, IX
- B. Develop skills in solving problems by using a computer. I, II, 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 real world applications and develop window images and controls. VI, X, VI, XII, VIII

*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 Outcome, Technological Literacy Outcome,, Transitional Strategy, Active Learning Strategy*
- 2. Learn to analyze and solve problems using structured and analytical techniques. *Technological Literacy, Active Learning*
- 3. Use professional tools to produce software components and documentation. *Technological Literacy, Active Learning, Transitional Strategies*
- 4. Plan the logic for complete business programs. *Technological Literacy Outcome, Active Learning Strategy, Communication Outcome*

*Strategies and outcomes listed after instructional processes reference TBR's goals for strengthening general education knowledge and skills, connecting coursework 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. Demonstrate the ability to work alone, communicate well and work within a group as assigned. B, C, D, E
2. Demonstrate the proper use of the editor, window environment and program operation procedures. A, E
3. Identify and properly use the keyboard, mouse and function key set. A, B
4. 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
5. Demonstrate working program commands, icons, operators, arguments, variables and controls. B, C, D, E
6. Demonstrate correct program syntax and design. B, C, D, E
7. Demonstrate use of program statements to match logic requirements. B, C, D, E
8. Demonstrate conversion of real-world math and data constructs into program format, statements, functions and/or modules. B, C, D, E
9. Demonstrate applications of the skills learned to develop a software product and internal or external software documentation. C, D, E
10. Demonstrate a working knowledge of the Visual Basic program language terms, statements, properties, methods, events, controls, forms and functions. B, C, D, E
11. Debug/refine software and meet all time (turn-in) requirements. C, D, E
12. Develop windows which are visually correct and which function according to specifications. B
13. Modify existing code to meet client requests. B, C, D, E
14. 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:

Students are evaluated primarily on the basis of tests and laboratory assignments. Each instructor must provide full details the first week of class via a syllabus supplement. 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:

93 - 100 A
88 - 92 B+
83 - 87 B
78 - 82 C+
73 - 77 C
65 - 72 D
Below 65 F

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*)

Other:

Students are expected to promptly attend all lecture and lab classes as assigned. If a class is missed, student must make up all work and get notes and/or handouts.