

9-2013

CSCI 110.01: Programming with Visual Basic I

Rhonda Tabish

University of Montana - Missoula, rhonda.tabish@umontana.edu

Let us know how access to this document benefits you.

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

Recommended Citation

Tabish, Rhonda, "CSCI 110.01: Programming with Visual Basic I" (2013). *Syllabi*. 228.
<https://scholarworks.umt.edu/syllabi/228>

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

MISSOULA COLLEGE

UNIVERSITY OF MONTANA

Department of Applied Computing and Electronics

Fall 2013

CSCI 110 Programming with Visual Basic I

Prerequisite: M090

Credits 3

T, R 10:10 – 12:00

Rhonda Tabish

rhonda.tabish@umontana.edu

243-7808; Office Location: AD14D

Office Hours: M, W 11 – 12

T, R 9:30 – 10:00

COURSE DESCRIPTION:

An introduction to object-oriented programming using an event-driven paradigm. Basic concepts of control structures, data handling, documentation, and error control. Fundamentals of algorithm design and structured software development.

STUDENT PERFORMANCE OBJECTIVES:

1. Students will be able to design and implement programs using Visual Basic.
2. Students will understand data types, variables, assignment statements, arithmetic operators and scope.
3. Students will design and implement the standard programming constructs of loops, repetition, and conditionals to solve problems.
4. Students will be able to simplify programming thru modularity by creating user defined procedures and functions.
5. Students will understand and use repetitive structures, arrays, searching, sorting and sequential files.
6. Students will design and implement multiple methodologies for the user to input and output information with a computing system.
7. Students will write programs with data validation and error handling
8. Students will demonstrate and apply documentation techniques.

TEXT:

Programming in Visual Basic 2010, by Julia Case Bradley and Anita C. Millspaugh, Irwin; ISBN 978-0-07-351725-4, available through the UM Bookstore <http://www.montanabookstore.com>.

OPTIONAL SUPPLIES:

USB Electronic Storage Drive (Jump-drive) to transport and backup files.

ATTENDANCE AND MAKEUP POLICY:

Students are expected to attend and participate in class. Because of the amount of material covered, it is important that students consistently attend class. Material covered in class will be helpful in completing course assignments. If class is missed it is the student's responsibility to determine what makeup is required. **Late assignments are not accepted.** Emergency situations will be handled privately on a case by case basis.

ASSESSMENT PROCEDURES:

Projects	50%
Quizzes	25%
Final Project	25%

GRADING SCALE:

90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	D

FINAL PROJECT/EXAM: Friday, December 13, 10:10 – 12:10

Be sure to use UMConnect for email communication.

INCOMPLETE GRADE POLICY:

It is assumed that students have the responsibility for completing the requirements of the courses in which they are enrolled within the time framework of the semester. Incompletes may be given when, in the opinion of the instructor, there is a reasonable probability that students can complete the course without retaking it.

The incomplete is not an option to be exercised at the discretion of students. In all cases it is given at the discretion of the instructor within the following guidelines:

1. A mark of incomplete may be assigned students when:
 1. They have been in attendance and doing passing work up to three weeks before the end of the semester, and
 2. For reasons beyond their control and which are acceptable to the instructor, they have been unable to complete the requirements of the course on time. Negligence and indifference are not acceptable reasons.
2. An incomplete which is not made up within one calendar year automatically will revert to the alternate grade which was assigned by the instructor at the time the incomplete was submitted.
3. **An incomplete remains on the permanent record and is accompanied by the final grade, for example, IA, IB, IC, etc.**

ACADEMIC INTEGRITY:

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The code is available for review online at <http://www.umt.edu/SA/VPSA/index.cfm/page/1321>.

Using the Web to research materials and concepts is an integral part of learning in the twenty-first century. Studying with other students is a productive method of learning. A certain amount of collaborating on concepts with other students and using resources found on the Internet in an assignment is recommended. Copy and paste is not acceptable. It is expected that each student will input his/her assignment into the computer, and each student must be able to explain any assignment turned in. Collaboration on exams is strictly forbidden.

DISABILITY ACCOMODATIONS:

Eligible students with disabilities will receive appropriate accommodations in this course when requested in a timely way. Please contact me after class or in my office. Please be prepared to provide a letter from your DSS Coordinator. For more information, visit the Disability Services website at <http://www.umt.edu/dss> or call 406.243.2243 (voice/text).

CHANGES TO SYLLABI:

Instructor reserves the right to modify syllabi and assignments as needed based on faculty, student, and/or environmental circumstances. If changes are made to the syllabus, amended copies will be dated and made available to the class.

CSCI 110 Programming with Visual Basic I Course Outline

- I. Introduction to Programming
 - A. What is a Program
 - B. Describing Visual Basic Environment
 - C. Writing a Visual Basic Project
 - D. Debugging

- II. Creating a User Interface
 - A. Types of Controls
 - B. Working with Multiple Controls
 - C. Setting Properties for User Convenience
 - D. Coding Controls

- III. Logical Expressions with Operators, Variables, and Constants
 - A. Variables and Constants
 - B. Calculations
 - C. Counting and Accumulating Data
 - D. Val Function

- IV. Conditionals, Error Control
 - A. If Statements
 - B. Conditions
 - C. Nested If Statements
 - D. Error Control
 - E. Message Boxes

- V. Logical Functions and Procedures
 - A. Common Dialog Boxes
 - B. Writing General Procedures
 - C. Calling Event Procedures
 - D. Passing Variables to Procedures
 - E. Using Logical Functions

- VI. User Input and Output Methodologies
 - A. Defining, Creating, and Coding Menus
 - B. Multiple Forms
 - C. Standard Code Modules
 - D. Variables and Constants in Multiple Form Projects
 - E. Formatting Data
 - F. Sending Output to the Printer

VII. Loops and Repetition

- A. List Boxes and Combo Boxes
- B. Do/Loops
- C. For/Next Loops
- D. Using the MsgBox Function
- E. Using String Functions

VIII. Array Structures

- A. Case Structure
- B. Single-Dimension Arrays
- C. For Each/Next Statements
- D. User-Defined Data Types
- E. Using List Boxes with Arrays
- F. Multi-Dimensional Arrays

IX. Data Files

- A. Writing and Reading Text Files
- B. Writing and Reading Delimited Files
- C. Net File Handling
- D. Using the File Common Dialog Box