



## Undergraduate Course Syllabus

### IT 225: Software Development w/ Visual Basic.NET

Center: Online

#### Course Prerequisites

IT 145, MAT 230

#### Course Description

This course introduces students to Visual Basic, an object-oriented, event-driven programming language. Emphasis is on programming for the .NET framework and the use of industry standards. Sequential access and random access files and the creation of graphical user interface (GUI) front ends for client server applications using ADO.NET connections to Microsoft Access databases are covered. This is a programming course.

#### Course Outcomes

By the end of the term you will have learned the following VB.Net programming skills:

- How to work within the Visual Basic.Net environment
- How to design and develop good user interface designs
- How to use logical programming constructs
- How to work with variables, constants and formulas
- How to use menus, dialog boxes
- How to program sub procedures and function procedures
- How to create projects using multiple forms
- How to create lists, work with Arrays, use loops and print
- How to program using the Visual Web Developer
- How to access and save database files
- Understand how to create object oriented programs
- How to incorporate graphics, animation, sound and drag and drop features into your applications

#### Required Materials

Programming in Visual Basic 2010

Bradley

1<sup>st</sup> Edition

2011

978-0-07-351725-4

### Instructor Availability and Response Time

Your class interaction with your instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be active in Blackboard at least five days a week, and you will normally communicate with your instructor in the open Blackboard discussion forum so that your questions and the instructor's answers benefit the entire class. You should send emails directly to your instructor only when you need to discuss something of a personal or sensitive nature, and in those cases your instructor will generally provide a response within 24 hours.

### Grade Distribution

Assessment Item	Percentage of Final Grade
Discussion	20%
Computer Programming: Assignments	30%
Computer Programming: Short Exercises	30%
Final Exam	20%
Total	100%

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

### University Grading System: Undergraduate

UC-COCE Undergraduate Grading System:		
Grade	Numerical Equivalent	Points
A	93-100	4.00
A-	90-92	3.67
B+	87-89	3.33
B	83-86	3.00
B-	80-82	2.67
C+	77-79	2.33
C	73-76	2.00
C-	70-72	1.67
D+	67-69	1.33
D	60-66	1.00
F	0-59	0.00
I	Incomplete	
IF	Incomplete/Failure*	
IP	In Progress (past end of term)	
W	Withdrawn	

\*Incomplete and Incomplete/Failure: Any student requesting an “I” grade must complete a Student Petition & Contract for a Grade of Incomplete and submit it to the proper offices prior to the final day of the term/semester. The petition will specify a deadline by which the coursework must be completed. The incomplete automatically becomes an “IF” if work has not been completed and a grade has not been submitted by the specific deadline.

### Grading Guides

Specific activity directions and grading guides can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

### Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. All assignments are due by 11:59 p.m. EST on the last day of the module week.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Icebreaker Activity (Required) Introduction to Visual Basic.Net and User Interface Design Reading: <i>Programming in Visual Basic</i> , Chapters 1 and 2 1-1 Discussion: Installing Visual Basic Development Environment 1-2 Doing: Install Visual Basic.NET 1-3 Doing: Module One Lessons 1-4 Doing: MSDN Videos 1-5 Computer Programming: Assignment One: Welcome Exercise
2	Variables, Constants, Math Operations, and Control Structures (Decisions and Conditions) Reading: <i>Programming in Visual Basic</i> , Chapters 3 and 4 2-1 Discussion: Decision Structures and Variables 2-2 Doing: Module Two Lessons 2-3 Computer Programming: Short Exercise: Furniture Discounts 2-4 Computer Programming: Assignment Two: Net Salary Calculator
3	Multiple Forms and Control Structures (Loops) Reading: <i>Programming in Visual Basic</i> , Chapters 6 and 7 3-1 Discussion: WPF 3-2 Doing: Module Three Lessons 3-3 Computer Programming: Short Exercise: Investment Calculator 3-4 Computer Programming: Assignment 3: Grade Calculation Exercise

4	Lists, Arrays, Menus, Dialog Boxes, Modules, and Functions Reading: <i>Programming in Visual Basic</i> , Chapters 5 and 8 4-1 Discussion: Arrays and For Loops 4-2 Reading: Module Four Lectures and Reading Material 4-3 Computer Programming: Short Exercise: Investment Calculator 4-4 Computer Programming: Assignment 4: Customer Order Processing Exercise
5	Database File Access and Web Applications Reading: <i>Programming in Visual Basic</i> , Chapters 9 and 10 5-1 Discussion: Security in Software 5-2 Doing: Module Five Lessons 5-3 Computer Programming: Assignment 5: Inventory Update Exercise 5-4 Computer Programming: Short Exercise - GPA Reporter
6	Saving/Reading Data to Files and Creating Object-Oriented Programs Reading: <i>Programming in Visual Basic</i> , Chapters 11 and 12 6-1 Discussion: Object-Oriented Programming 6-2 Doing: Module Six Lessons 6-3 Computer Programming: Short Exercise: Reading Files 6-4 Computer Programming: Assignment 6: Customer Directory Application
7	Advanced Topics Reading: <i>Programming in Visual Basic</i> , Chapter 14 7-1 Discussion: XML and Its Use 7-2 Doing: Module Seven Lessons 7-3 Computer Programming: Short Exercise: Object-Oriented Programming 7-4 Computer Programming: Assignment 7: Adding Images to Directory Application
8	Graphics, Animation, and Sound Reading: <i>Programming in Visual Basic</i> , Chapter 13 8-1 Discussion: Programming and Employment 8-2 Doing: Module Eight Lessons 8-3 Computer Programming: Assignment 8: Customer Records 8-4 Test: Final Exam 8-5 Computer Programming: Short Exercise: Field Validation

### Attendance Policy

Failure to participate during the first week of the course (12:00 a.m. Monday through 11:59 p.m. Sunday) will result in automatic withdrawal. Participation is defined as posting within a discussion board, wiki, or blog, and/or submitting an assignment. Students who do not participate during the first week forfeit their rights to be reinstated into the course.

Extended absences, defined as failure to post into the Blackboard classroom for more than five days, must be coordinated with the instructor. Students who fail to coordinate any such absence with the instructor, or who fail

to withdraw from the course in accordance with the COCE official drop and withdrawal policy, will be graded appropriately.

All assignments must be submitted through the appropriate Blackboard tool by 11:59 PM Eastern Standard Time on the specified due date. Refer to the Assignment Guidelines and Rubrics folder for specific details on completing the assignments in this course.

#### **SNHU College of Online and Continuing Education Withdrawal Policy**

<https://my.snhu.edu/layouts/FormServer.aspx?XsnLocation=https://my.snhu.edu/FormServerTemplates/COCE.Withdrawal.revised.form.xsn&SaveLocation=https%3A%2F%2Fmy%2Esnhu%2Eedu%2FOffices%2FCOCE%2FAdvising%2FCourse%20Withdrawal%20Library&OpenIn=browser>

#### **SNHU College of Online and Continuing Education Guide to Student Success**

<https://my.snhu.edu/Resources/StudentHandbooks/Pages/default.aspx>

#### **Blackboard Course Tools/Areas Overview**

Your course will be delivered through Blackboard. Below are the most often used Blackboard tools and areas.

<b>Tool/Area</b>	<b>Description</b>	<b>You Should...</b>
Announcements	This area is used to post day-to-day course details such as the status of or directions for assignments.	Check the announcements on a regular basis, at least several times each week.
Course Information	The course syllabus, assignment guidelines and rubrics, technical support, Student Handbook, and advising information can be found here.	Check this area at the start of the class. It is recommended that the syllabus be downloaded for future reference.
Learning Modules	This area contains course content, including lectures, readings, resources, and assignments.	Check this area at the start of each module and throughout the module week to review course materials.
Discussion Board	This is one of the areas for discussion and collaboration in the class.	Participate and contribute on a regular basis if your course includes discussions.
Research/Writing	SNHU library and research information can be found here.	Check this area for links and information on different library-related resources.
My Instructor	Instructor information is located in this area.	Check this area to find out about your instructor's background and contact information.
My Grades	Assignment grades are located in this area.	Check this area to find out your grades for your course assignments.

#### **Southern New Hampshire University Policies**

More information about SNHU policies can be found at

<https://my.snhu.edu/Academics/Pages/SyllabiStatements.aspx>.

<p><b>Continuing Education Center Instructor Availability:</b> All undergraduate Continuing Education instructors at all center locations (Manchester, Nashua, Salem, Portsmouth, and Brunswick, Maine) will be available to students for a minimum of four additional hours of face-to-face meeting time per term. This time is in addition to the required 20 hours of face-to-face time in hybrid classes and the required 40 hours of face-to-face time in lecture classes. How the additional meeting time is utilized is at the discretion of the instructor and may vary by course.</p>
<p><b>Academic Honesty Policy:</b> Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Students involved in such activities are subject to serious disciplinary action. Plagiarism is defined as the use, whether by paraphrase or direct quotation, of the published or unpublished work of another without full and clear acknowledgment. Cheating includes the giving or receiving of unauthorized assistance on quizzes, examinations, or written assignments from any source not approved by the instructor. Understand that in taking this course, your assignments may be submitted to Turnitin.com or other plagiarism-detection services and reviewed for textual similarity suggestive of plagiarism. All submitted papers are subsequently included as source material in the Turnitin.com database for the purpose of detecting plagiarism in other submitted work. Please review the Turnitin.com Usage Policy should you have any questions. For more about academic dishonesty, please refer to the undergraduate or graduate catalogs.</p>
<p><b>ADA/504 Compliance Statement:</b> Southern New Hampshire University is committed to and concerned with meeting the needs of students challenged by physical, sensory, psychiatric and/or learning disabilities with regard to the Americans with Disabilities Act (ADA), as amended, and Section 504 of the 1973 Rehabilitation Act. At the beginning of each term, or as soon as you become aware of a disability, we encourage you to contact the Office of Disability Services to discuss accommodations for which you may be qualified.</p> <p>For questions concerning support services, documentation guidelines, or general disability issues:</p> <p style="padding-left: 40px;">Office of Disability Services, Exeter Hall, Suite 59 Hyla Jaffe, Director 603.626.9100 ext. 2386 h.jaffe@snhu.edu</p> <p>For questions concerning disability-related compliance matters, grievance, or legal issues:</p> <p style="padding-left: 40px;">Ms. Jet Goldberg, ADA/504 Compliance Officer Director of Wellness Center 603-645-9679 j.goldberg@snhu.edu</p>
<p><b>Technical Support:</b> Support for technology and Blackboard software issues can be found at <a href="http://www.snhu.edu/techsupport">http://www.snhu.edu/techsupport</a> or by dialing SNHU 24/7 Live Support at 1-877-708-2909.</p>
<p><b>Academic Assistance:</b> Online students enrolled in undergraduate courses in the areas of math, writing, accounting, and statistics will have access to Smarthinking online tutoring: <a href="https://my.snhu.edu/offices/COCE/Tutoring/Pages/default.aspx">https://my.snhu.edu/offices/COCE/Tutoring/Pages/default.aspx</a>.</p>
<p><b>Library Resources Statement:</b> In addition to the intellectual resources available onsite and online, <a href="https://my.snhu.edu/Academics/Library/Pages/default.aspx">https://my.snhu.edu/Academics/Library/Pages/default.aspx</a>, Shapiro Library makes available group and one-on-one instruction in information literacy, enabling students to define and articulate what knowledge-based</p>

resources are relevant to their research interests. Library staff are available to assist students in effectively and efficiently accessing information from credible sources, to compare new knowledge with prior beliefs, and to consider the related ethical, legal, and socioeconomic issues that are inherent in scholarly investigation.

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