

Computer Programming Department
Business/Public Service Division
GREENVILLE TECHNICAL COLLEGE

COURSE SYLLABUS

Course Title: Visual Basic.Net I

Course Number: CPT 186

Lecture hours per week: 3.0

Lab/Clinic Hours:

Semester credit hours: 3.0

Prerequisite: CPT 101 or CPT 113, MAT 102 or higher

Catalog Course Description: This course introduces the student to development of Visual Basic Windows applications using the Microsoft.Net framework.

Purpose of the Course: To teach the student Visual Basic programming using the Microsoft.NET framework.

Required text(s) or other materials:

1. Programming in Visual Basic 2010, 8th Edition; Bradley & Millspaugh; McGraw – Hill Publishing; ISBN: 978-0-07-351725-4
2. NOTE: Students in traditional classes must access Blackboard for course-related information. Students in hybrid and online classes will access their online content through Blackboard.

COLLEGE-WIDE STUDENT LEARNING OUTCOMES

1. Communication – Students will demonstrate the ability to use active reading and listening skills and to produce effective written and oral communication for varying audiences.
2. Information Technology and Technological Literacy – Students will demonstrate competency in using computer technology within a field of study.
3. Critical Thinking/Reasoning – Students will demonstrate the ability to apply the scientific method, mathematical processes, and research skills to analyze and solve problems/issues by using reflection and reasoning to justify conclusions.
4. Professional and Personal Responsibility – Students will demonstrate the ability to exhibit conduct, attitudes, and etiquette appropriate to the student's community and chosen career. Students will demonstrate the ability to manage time, to use effective interpersonal skills, and to display responsible behavior.
5. Diversity – Students will demonstrate the ability to recognize diversity and to demonstrate respectful conduct and attitudes toward all. Students will demonstrate the ability to explain how global issues impact life, work, and opportunities.

Approved March 26, 2009

COMPUTER TECHNOLOGY PROGRAM LEVEL STUDENT LEARNING OUTCOMES

Upon successful completion of the CPT/Programming program, the graduate will be able to:

1. Students will be able to analyze, design, develop, and document solutions that will satisfy the information needs of business users using established design methodologies and standards.
2. Students will be able to design, create, test, and document logical programming solutions to prescribed specifications following established standards and using current development environments and languages for application development and database management.
3. Students will be able to demonstrate the knowledge and ability to install and maintain microcomputer hardware and operating system software.
4. Students will be able to demonstrate the use of a minimum of three business application software packages.
5. Students will be able to demonstrate fundamental team building, project management, and presentation skills by participating in team projects that include team goals and values, a development methodology for documentation and coding, group presentations, and exposure to topics such as diversity, time management, and goal setting.
6. Students will be able to demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" computer lab assignments.

CPT 186 COURSE OUTCOMES

Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

1. Students will be able to demonstrate the ability to take initiative by completing a lab assignment with minimal supervision.
2. Students will be able to demonstrate the ability to work under pressure, and show responsibility by completing lab assignments.
3. Students will be able to demonstrate the ability to design, create, and test a GUI (Graphical User Interface) programming solution according to a specified set of instructions by completing a lab assignment in Visual Basic.NET that incorporates variables, properties, methods, events, various controls and programming constructs, user defined functions that return a value, dialog boxes, validation methods and exception handling.
4. Students will be able to demonstrate the ability to create printed output by completing a lab assignment using the PrintDocument class to produce output for the printer or the screen.
5. Students will be able to demonstrate the ability to debug Visual Basic project solutions by effectively identifying and correcting syntax errors, run-time errors, and logic errors by completing a debugging lab assignment.
6. Students will be able to demonstrate the ability to access and display information stored in a database using ADO.NET to complete a lab assignment.
7. Students will be able to demonstrate the ability to process data stored in a disk file by completing a lab assignment using iostreams to read and write data stored in a disk file.

The objectives of the CPT 186 course are intended to meet the CPT/Programming program level student learning numbered 2 and 6 above.

Introduction Assignment Due

Chapter 1 – Introduction to Visual Basic.NET 2010

Extra Credit Chapter 1 Assignment Due

Chapter 2 – User Interface Design

Chapter 2 Assignment Due

Chapter 3 – Variables, Constants, & Calculations

Chapter 3 Assignment Due

******* Test 1 ******* *Chapters 1, 2, and 3 EC Hands On Due*

Chapter 4 – Decisions & Conditions

Chapter 4 Assignment Due

Chapter 5 – Menus, Common Dialog Boxes, Sub-Procedures, & Function Procedures

Chapter 5 Assignment Due

******* Test 2 ******* *Chapters 4 and 5 EC Hands On Due*

Chapter 6 – Multiform Projects

Chapter 6 Assignment Due

Chapter 7 – Lists, Loops, & Printing

Chapter 7 Assignment Due

Chapter 8 – Arrays

Chapter 8 Assignment Due

******* Test 3 ******* *Chapters 6, 7, and 8 EC Hands On Due*

Chapter 9 – Web Applications

Chapter 9 Assignment Due

Paper on the adoption of VB.NET around the world Due

Chapter 10 – Database Applications

Chapter 10 Assignment Due

Chapter 11 – Data Files

Chapter 11 Assignment Due

Chapter 13 – Graphics, Animation, Sound, and Drag-and-Drop

Extra Credit Chapter 13 Assignment Due

*******Comprehensive Final Examination *******

CPT 186 – Course Specific Requirements

A USB portable storage device such as a flash drive will be needed for coursework storage.

SPECIAL NOTE TO ONLINE STUDENTS: The final exam for online students will be administered on the Barton Campus and will be scheduled at a time determined by the department.

CPT 186 – EVALUATION AND GRADING INFORMATION

GRADING POLICY

- **Twenty (20) percent** of the final grade will be based on successful completion of programming assignments and a written assignment. **Penalties for inaccurate results will be assessed per assignment.** The written assignment is a one – two page paper on the adoption of Visual Basic.NET 2010 around the world. A rubric for assessment of the written assignment will be provided.
- **Fifty-five (55) percent** of the final grade will be based on Lecture/Lab quiz/test grade averages.
- **Twenty-five (25) percent** of the final grade will be based on the comprehensive final examination.

All assignments (i.e., labs, projects, research papers, etc.) for this course must be completed and submitted to the instructor by the due date established in order to receive credit for the assignment.

Final letter grades will be issued as follows:

A	=	90 - 100
B	=	80 - 89
C	=	70 - 79
D	=	60 - 69
F	=	0 - 59

NOTE: ALL TESTS AND EXAMS ARE RETAINED BY THE INSTRUCTOR.

READ THIS SYLLABUS CAREFULLY

You should read this syllabus carefully and ask your instructor about *any* aspects that you do not understand. The syllabus is an agreement between you and your instructor concerning course objectives, course content, grading, and other policies and procedures particular to this course. The above information is specific to the course. Three additional documents are provided as attachments and *are considered a part of this syllabus*:

Attachment 1:

Each instructor will provide a supplement to this syllabus. The supplement will include: a week-by-week plan of instruction based on the section in which you are enrolled; your instructor's name, office hours and/or office location; and your instructor's contact information and recommended best methods to contact your instructor.

Attachment 2:

The Department responsible for developing and teaching has policies and procedures in place to assure quality instruction for all students. These are attached as "Departmental Policies and Procedures."

Attachment 3:

Please note that it is your responsibility to read the current Student Handbook included in Greenville Technical College's Catalog. (See website.) The Student Handbook addresses specific academic and student conduct policies and procedures. Excerpts from the Student Handbook representing the policies and procedures most often referred to in working with students are provided for your convenience as "Attachment 3."

Approved by:



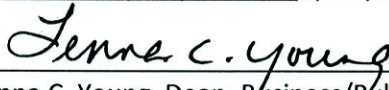
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27 June 11
Date

This syllabus will remain in effect until revised or reviewed no later than August 2012.