

Computer Technology Department
Business/Public Service Division
GREENVILLE TECHNICAL COLLEGE

COURSE SYLLABUS

Course Title: Visual Basic.Net II

Course Number: CPT 286

Lecture hours per week: 3.0

Lab/Clinic Hours:

Semester credit hours: 3.0

Prerequisites: CPT 186. Computer Technology students must obtain a minimum grade of "C" in all CPT and IST courses.

Catalog Course Description: This course is a study of advanced techniques for Visual Basic programming using the Microsoft.Net framework.

Purpose of the Course: This course is a study of advanced techniques for Visual Basic programming using the Microsoft.Net Framework.

Required text(s) or other materials:

1. Advanced Programming Using Visual Basic 2008, 4th Edition; Bradley and Millsbaugh; McGraw – Hill Publishing; ISBN: 978-0-07-351722-3
2. A USB portable storage device such as a flash drive will be needed for coursework storage.
3. There are several assignments that will require the use of Visual Studio.Net Professional 2008, not the student version. The software is available through ELMS.
4. 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.

Revised December 31, 2012

COMPUTER TECHNOLOGY PROGRAM LEVEL STUDENT LEARNING OUTCOMES
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Upon successful completion of the Computer Technology Degree students will be able to:

1. Install computer and network hardware.
2. Install computer operating systems and application software.
3. Design, create and test computer programming solutions.
4. Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing “hands-on” computer assignments.
5. Analyze, troubleshoot, and correct computer related technical problems.

Revised August 2012

CPT 286 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 knowledge of MDI applications by completing an MDI lab assignment.
4. Students will be able to demonstrate knowledge of multitier applications using classes that handle exceptions by completing a multitier lab assignment.
5. Students will be able to demonstrate knowledge of ADO.NET components by completing a database application lab assignment.
6. Students will be able to demonstrate knowledge of processing data stored in related tables of a database by completing a lab assignment that retrieves and displays data in stored in related tables.
7. Students will be able to demonstrate knowledge of updating tables in a database application by completing a lab assignment that processes data using add, save, delete, cancel, and edit logic on the records in a database.
8. 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

project in Visual Basic.NET that incorporates collections that add, remove, retrieve and display items from a collection and incorporates help files and context-sensitive Help into the project using HTML Help Workshop.

The objectives of the CPT 286 course are intended to meet the CPT program level student learning outcomes.

CPT 286 – MAIN TOPICS

PLAN OF INSTRUCTION:

TEXT

<u>CHAPTER</u>	<u>MAJOR TOPICS</u>
Chapter 1	Visual Studio and the .NET Framework Chapter 1 Assignment Due
Chapter 2	Building Multitier Programs with Classes Chapter 2 Assignment Due
Test 1	Chapters 1 and 2
Chapter 3	Windows Database Applications Chapter 3 Assignment Due
Chapter 4	Windows Database Using Related Tables Chapter 4 Assignment Due
Test 2	Chapters 3 & 4
Chapter 5	Windows Database Updates Chapter 5 Assignment Due
Chapter 12	Creating Help Files Chapter 12 Assignment Due
Test 3	Chapters 5 & 12
Chapter 9	Reports Chapter 9 Assignment Due
Chapter 10	Collections Chapter 10 Assignment Due Paper on the translation services for Visual Studio in foreign countries due.
Chapter 11	User Controls Chapter 11 Assignment Due
Mobile App Lecture – Creating a Mobile App in Windows	Mobile App Assignment Due

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

CPT 286 – COURSE SPECIFIC REQUIREMENTS

There are no specific course requirements other than attachment 1.

CPT 286 – EVALUATION AND GRADING INFORMATION

Grades will be calculated as follows:

- **Twenty (20) percent** of the final grade will be based on successful completion of programming assignments, a lab project, and a written assignment. **Penalties for inaccurate results will be assessed per assignment.**

The written assignment is a one – two page paper on the translation services offered by Microsoft for Visual Basic.NET 2008/2010/2012 around the world. It is to include the countries VB.NET is available in, the languages Microsoft has translated VB.NET into, the type of translation services, if any, available from Microsoft or from 3rd party vendors for those languages for which VB.NET has not yet been translated into, and it should answer the following question: **What arrangements (if any) does Microsoft have in place for those countries other than English speaking countries whose programmers want to use Visual Studio.NET?** 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.

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

Final letter grades will be issued as follows:

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