Business and Technology Division Computer Technology Course Syllabus PHP Programming I CPT 283

Credit/Contact Hours Prerequisite Co-requisite Course Description Purpose of Course Required Texts Additional Materials Course Outcomes Program Student Learning Outcomes Greenville Technical College Core Competencies Instructional Agreement Grading Scale Course Policies

Credit/Contact Hours:

3.0

Prerequisite: CPT 186 or CPT 187 or CPT 230 and IST 226 or IST 237

Co-requisite: None

Course Description:

This course is an introduction to the PHP programming language and will cover topics related to the syntax of PHP language and how PHP can be used to design and develop dynamic, database-driven web pages.

Purpose of Course:

This course introduces the student to the development of dynamic web applications using PHP for the programming language and MySQL for relational databases on the

server-side to produce HTML coded web pages. Students will learn how to collect data from a webpage, process the data, and then produce meaningful output.

Required Texts:

- 1. **Murach's PHP and MySQL, Second Edition**; Joel Murach and Ray Harris; Mike Murach & Associates, Inc.; ISBN: 978-1-890774-79-0 (Paperback)
- 2. Access to an Internet-capable computer system.
- 3. NOTE: <u>Students in traditional classes</u> must access Blackboard for course-related information. <u>Students in hybrid and online classes</u> will access their online content through Blackboard.

Additional Materials:

Students in CPT 283 will be assigned a virtual server to complete all of their CPT 283 assignments and projects on. Students must be able to access the Internet with their personal computers in order to do access their assigned virtual server. Students will also have access to their assigned virtual server on the course classroom computers and the division's Open Lab in rooms 103-113 and 103-115.

Course Outcomes:

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

- 1. Students will be able to demonstrate knowledge on how to write, execute, and debug PHP programs imbedded in web pages.
- 2. Students will be able demonstrate how to use PHP commands and syntax to declare and use variables, use PHP functions or create custom functions, write looping statements, decision statements, and create and main arrays.
- 3. Students will be able to demonstrate how create user friendly web page interfaces that use imbedded PHP programs to access and manage a MySQL database or document object model.
- 4. Students will be able to demonstrate the ability to work under pressure and show responsibility by completing lab assignments.

The outcomes of the CPT 283 course are intended to meet the Computer Technology program level student learning outcomes.

Revised January 16, 2015

Program Student Learning Outcomes:

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.
- 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

Greenville Technical College Core Competencies:

Communication Core Competency: Students will demonstrate effective written and oral communication skills to convey information, ideas, or opinions.

- Written Communication: Students will demonstrate effective written communication skills to convey information, ideas, or opinions.
- Oral Communication: Students will demonstrate effective oral communication skills to convey information, ideas, or opinions.

Critical Thinking Core Competency: Students will demonstrate effective reasoning, problem solving, or quantitative skills to develop an opinion or conclusion.

- Critical Reasoning: Students will employ inquiry, analysis, and synthesis of information to formulate and/or evaluate an opinion or conclusion.
- Problem Reasoning: Students will design and formulate a strategy to answer a question or achieve a desired goal.
- Quantitative Reasoning: Students will be able to analyze numerical information or observable facts resulting in informed conclusions.

Information Literacy Core Competency: Students will be able to locate, evaluate, and use information effectively from diverse sources.

Professionalism Core Competency: Students will demonstrate conduct and etiquette appropriate to the community and chosen career.

- Professionalism: Students will display professional conduct and work habits.
- Teamwork: Students will collaborate with others to accomplish a shared goal.

Instructional Agreement:

This syllabus is an agreement between the student and instructor concerning course objectives, course content, grading and other policies and procedures particular to the course as well as any posted program, departmental, and divisional policies. It is also the student's responsibility to become familiar with the Student Handbook/College Catalog found in the Student Resource area of Blackboard.

Grading Scale: GRADING POLICY

Journal Entry and Lab Assignments 30 percent

Chapter Tests

30 percent

Final Project

40 percent

NOTE: ALL JOURNAL ENTRIES, LAB ASSIGNMENTS, CHAPTER TESTS AND FINAL PROJECTS WILL BE RETAINED BY THE INSTRUCTOR.

- 1. Students will be assigned a Journal Entry for each chapter covered in this course; Journal Entries are a series of open-ended questions about the content of each chapter.
- 2. Lab Programming Assignments will be assigned from selected chapters.
- 3. There will be three or four Chapter Tests covering textbook content in this course.
- 4. Each student will complete a Final PHP Programming Project as directed by the instructor; each student's Final PHP Programming Project must be original work completed by the student, no other student's work or downloaded code from the Internet will be accepted.

- 5. The following factors will be considered in grading lab assignments and the final project:
 - a. The programs must work correctly and produce the desired results.
 - b. The programs must be written in the style described in the text or described in class.
 - c. The programs must be written using the syntax discussed in class and textbook.
 - d. Program documentation should be clear, meaningful, and professional.

All Journal Entry and Lab Programming Assignments, Chapter Tests, and Final PHP Programming Project for this course must be completed and submitted to the instructor by the published due date in order to receive credit for the assignment.

Final letter grades will be issued as follows:

Course Policies:

CPT 283 students must complete and submit a Final PHP Programming Project in order to complete the course and receive a final overall grade.

CPT 283 – Main Topics

- Introduction to web development with PHP
- How to code a PHP application
- Introduction to relational databases and MySQL
- How to use PHP with a MySQL database
- How to use the MVC pattern to organize your code
- How to test and debug a PHP application

- How to work with form data
- How to code control statements
- How to work with strings and numbers
- How to work with dates
- How to create and use arrays
- How to work with cookies and sessions
- How to create and use functions
- How to create and use objects
- How to use regular expressions, handle exceptions, and validate data
- How to create secure websites

The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content. Refer to attachment one for more details about this class.

Disabilities Information

Students with disabilities, including those who were served in Special Education (resource or tutorial), should contact Student Disability Services (SDS) to discuss their need for services and accommodations. The main SDS office is located on the Barton Campus in the Student Center Building 105, office 113.

Staff can be reached by phone at 864 250-8202 or via email to <u>DisabilityServices@gvltec.edu</u>. Appointments are available at all satellite campus locations. Please check the GTC website for more information concerning Student Disability Services: <u>http://gvltec.edu/disability-services/</u>

Efforts have been made to ensure all materials presented in an electronic format are accessible for students with disabilities and the college is committed to this obligation. However, if you experience any difficulty accessing these materials please notify your instructor immediately so a solution can be provided. You may also contact Student Disability Services directly at 864-250-8202 or by email at <u>DisabilityServices@gvltec.edu</u>.

Students who need a PDF reader for accessibility of course documents presented in PDF format may download a free reader at https://acrobat.adobe.com/us/en/products/pdf-reader.html

Starfish

We care about your success! Greenville Technical College is proud to offer Starfish, a software tool designed to promote student success through coordination and communication between students, instructors and support staff.

When you set up your profile in Starfish, you can connect with services, faculty and staff at Greenville Technical College. The link to Starfish is located in Blackboard. Throughout the term, you may receive emails regarding your attendance, course grades or academic performance.

To benefit from this software, it is important that you check your Greenville Technical College Gmail regularly and read the Starfish alerts. If your academic performance begins to drop, you may also be contacted directly by a Success Coach or the Student Success Center.

Start, Stay, Succeed!