

**Common Course Outline**  
**CSIT 224**  
**Server-Side Scripting with PHP**  
**4 Credits**

**The Community College of Baltimore County**

**Description**

**CSIT 224 – 4 credits – Server-Side Scripting with PHP** introduces students to Hypertext Preprocessor (PHP) and MySQL to develop dynamic web sites. Topics will include conditionals, functions, form processing, arrays, and loops. Students create a dynamic web site by developing database tables in MySQL, connecting to them using PHP and adding content to web pages.

**4 Credits**

**Prerequisite: CSIT 111, CSIT 121, and CSIT 154 or consent of the Program Director**

**Overall Course Objectives**

Upon completion of this course students will be able to:

1. describe server-side scripting and how to execute scripts on web servers;
2. integrate PHP and Hyper Text Markup Language (HTML) within the source code of a web document;
3. recognize, explain and use PHP variables and operators;
4. make decisions with PHP using conditionals;
5. manipulate strings using PHP defined functions;
6. code a user defined function and pass a parameter;
7. use PHP to process an HTML form;
8. code arrays and utilize loops to process data;
9. design and develop a database in MySQL;
10. connect to a MySQL database using PHP;
11. set and extract data from a cookie; and
12. develop a database-driven dynamic web site.

**Major Topics**

- I. Introduction
  - A. PHP/MySQL as a Web Application Platform
  - B. HTTP Requests and Responses
- II. Using Variables and Input
  - A. Data Types
  - B. Variable Scope
- III. Control Structures
  - A. Decisions
  - B. Iteration
  - C. Loops and Arrays

- IV. Working with Data
  - A. String Manipulation
  - B. Arrays
  - C. External Files
  - D. Arrays
  - E. Databases
- V. Session Management
  - A. Working with Cookies
  - B. Working with Session(s)
- VI. Using MySQL to Create Databases
  - A. Designing Tables
  - B. Creating Databases and Tables
  - C. Managing Permissions
  - D. Inserting Records
  - E. Selecting Data
  - F. Updating Data
  - G. Deleting Data
- VII. Connecting to Databases within PHP
  - A. Making the Template
  - B. Connecting to MySQL and Selecting the Database
  - C. Error Handling
  - D. Executing Simple Queries
  - E. Retrieving Query Results
  - F. Updating Records with PHP
- VIII. Web Application Development
  - A. Debugging Techniques
  - B. PHP Error Management
  - C. MySQL Error Management
- IX. Improving Web Application Performance

### **Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member but will include at minimum the following:

- 2 Exams
- 5 Projects
- 1 Final Web Application Project

Writing Requirement: Students are required to utilize appropriate academic resources.

### **Other Course Information**

This course is taught in a computerized environment.

This is an elective course for the Web Development option of the Information Technology Degree Program.