

# **COURSE OUTLINE**

## **CMSY-203**

### **Introduction to PHP**

**3 Credits**

## **HOWARD COMMUNITY COLLEGE**

### **Description**

PHP is an open source server-side scripting language used to create dynamic, data-driven websites for such applications as web-based content management and display systems. It performs many of the same functions as ASP and ColdFusion. In this course students will learn how to use several features of this scripting language. Students will write scripting code within the class and in assignments outside of class. Prerequisite: CMSY-121, CMSY-128 OR CMSY-129. (3 hours weekly)

### **Overall Course Objectives**

Upon successful completion of this course, the student will be able to:

1. Identify PHP's capabilities as a server-side scripting language, and the reasons for its popularity.
2. Use a text editor for editing and saving HTML documents and PHP scripts.
3. Manipulate variables and data in PHP.
4. Pass data to PHP documents by using URL parameters and forms.
5. Process strings, numbers, arrays, dates and Boolean values with PHP.
6. Write flow control statements within PHP scripts.
7. Use regular expressions and work with files in PHP.
8. Use PHP to input and output data into a MySQL database to and through a web server.

### **Major Topics**

- I. Using PHP
  - a. How PHP functions as a server-side scripting language
  - b. Elements of the basic PHP development process
  - c. Embedding PHP statements within HTML documents
  - d. Using comments within PHP scripts
- II. Data and Variables in PHP
  - a. Functions of the different data types in PHP
  - b. Using PHP operators
  - c. Working with PHP variables
  - d. Receiving form input into PHP scripts
- III. Controlling Script Flow in PHP
  - a. Using conditional statements (if, else if, else, and switch)
  - b. Using loops to repeat statements (for and while)
  - c. Using logical operators
- IV. Using PHP Functions
  - a. Using basic PHP functions
  - b. Creating user-defined PHP functions
- V. Using Arrays for List Data
  - a. Understanding how arrays work within PHP code
  - b. Creating and modifying sequential and associative arrays
  - c. Using loops with arrays (for and for each)

- d. Sorting arrays
- e. Using multidimensional arrays
- VI. Matching Patterns and Working with Files
  - a. Working with patterns and regular expressions
  - b. Reading a file into an array
  - c. Opening, reading, and writing to files
- VII. Managing Multiple-Form Applications
  - a. Using hidden form fields
  - b. Sending an e-mail from a PHP script
  - c. Using browser cookies
  - d. Using PHP sessions
- VIII. Using Databases with PHP Scripts
  - a. Choosing and installing a database system
  - b. Creating and managing a MySQL database
  - c. Creating tables with SQL
  - d. Retrieving, inserting, updating, and deleting data using SQL
  - e. Using PHP's MySQL functions to retrieve, insert, update, and delete data

### **Course Requirements**

Specific assignments and procedures for evaluating student performance in the class will be described in the individual class syllabus, but will include the following:

1. Lab projects creating PHP scripts with the features of each lesson.
2. Written tests on definitions and procedures.
3. Writing and debugging scripts with PHP to demonstrate acquired skills.

### **Other Course Information**

This course is an Internet elective and a Business elective.