



COURSE DESCRIPTION

This class will introduce you to the basics of PHP and MySQL. You will start from the ground up, learning PHP syntax, conditional statements, arrays, loops, strings, functions etc. You will work with forms, sanitize user input for security, send emails, work with cookies to collect information, and upload files. You will use phpMyAdmin to build your database and tables and write SQL queries to fetch, insert, update, delete, and search records. Live face-to-face instructor - still the best way to learn!

DETAILED COURSE OUTLINE

BASIC PHP SYNTAX

This exercise gets you started with the basics of PHP syntax. If you don't have previous programming experience, you will find that PHP is pretty simple to learn.

- Echo, Strings, and Variables
- Single Quotes vs. Double Quotes
- Escaping Characters
- Heredoc
- Concatenation
- Comments

ARRAYS

One of the most common and powerful types of variables is called an array. There are many ways you can create, output, and manipulate arrays, but here we will just focus on some of the most commonly-used basics.

- Creating a simple array
- Using array()
- Multidimensional Arrays
- Printing an Entire Array Using print_r()

FUNCTIONS & OBJECTS

In this exercise, you will learn the basics of functions and how to use arguments within them. We will go over how to create objects with properties and methods. We will explore the differences between public and private properties, and how to extend classes' functionality.

- Functions
- Arguments
- Objects and Properties
- Objects and Methods
- Private Properties
- Creating Classes that Extend Classes

WORKING WITH NUMBERS

In this exercise, we will show you how PHP works with numbers.

- Arithmetic Operators
- Assignment Operators
- Table of Arithmetic Operators
- Table of Assignment Operators
- Defining a Site and Testing Server in Dreamweaver

LOOPS

Loops are an incredibly important and often-used element of your programming tool belt. Here we will explore the many kinds of loops PHP has to offer.

- While Loops
- Do...While
- For Loops
- ForEach
- Break Out of Loop
- Continue

FORM BASICS AND SECURITY

In this exercise, we will cover the basics of PHP form submission. You will learn the difference between POST and GET, how to deal with radio buttons, checkboxes, and select fields, and how to secure your pages from attacks.

- Setting up a basic form
- Post vs. Get
- Radios, Checkboxes, and Select Fields
- Magic Quotes
- Securing the page

CONDITIONALS

Conditional operators will be one of the most-used elements of your programming life. Simply put, conditional operators are a way to choose when certain things happen. For example, if something is true, then do something. If it is not true, do something else.

- If/Else
- Elseif
- Switch
- Comparison Operators
- Logical Operators
- The Difference Between == and ===

WORKING WITH STRINGS

Let's explore some basic string functions.

- Comparing Strings
- Converting to Upper and Lower Case
- Searching Through Strings
- Case-Sensitive and Case-Insensitive

SENDING EMAIL

One of the great things about PHP is how easy it is to send an email. In this exercise we will show you how to set up MAMP Pro or XAMPP to send test emails.

- Setting Up MAMP Pro
- Setting Up XAMPP and Mercury Mail
- Sending a Test Email



DETAILED COURSE OUTLINE (CONT.)

SIMPLE FORM VALIDATION AND EMAIL

This exercise will focus on a very simple form validation script that checks for simple errors, sanitizes input, and sends an email.

- ➔ Sanitizing Input
- ➔ Error Checking
- ➔ Displaying Errors
- ➔ Sending Email
- ➔ Adding a Thank You Page
- ➔ Including Files

COOKIES

Every website should use analytics to track where visitors come from and find information such as their landing page, how many times they have visited, where they came from, etc. and store it in a cookie.

- ➔ Adding Cookies
- ➔ Tracking the Number of Visits
- ➔ Sending an Email with the Cookie Info

SESSIONS

In this exercise we will create a simple login/logout application where we make a few pages password-protected.

- ➔ Starting a Session
- ➔ Using Session Variables
- ➔ Log In/Log Out
- ➔ Destroying Session Variables

FILE UPLOADS

In this exercise we will show you some very basic security measures as well as how to upload files. If you add this type of capability on your live site, it should be in a password-protected area or authenticated in some way.

- ➔ Making a File Upload Form
- ➔ The \$_FILES Array
- ➔ Uploading Files
- ➔ Basic Security

CREATING A DATABASE/MYSQL/SELECT

In this exercise, you'll learn how to create a database in the phpMyAdmin control panel, as well as how to connect to a database and display some data.

- ➔ Creating a New Database
- ➔ Connecting to the Database
- ➔ SQL Basics
- ➔ The SELECT Statement
- ➔ Display the Number of Rows Returned
- ➔ Making a Reusable Connection Script
- ➔ MySQL vs. MySQLi vs. PDO

MAKING A REUSABLE CONNECTION SCRIPT

Because we will be connecting to the same database from several webpages, it makes sense to save the connection script into another page. That way, we can just include it at the top of any page that needs to connect to the database.

- ➔ Error Checking
- ➔ Making an Include
- ➔ Sorting Results

PREPARED STATEMENTS

In this exercise we are going to show how to select a certain row of data in a database. We will select all the records in the database that are equal to a certain email.

- ➔ Selecting and Filtering Results
- ➔ Preventing SQL Injection Attacks with Prepared Statements

SQL: INSERT

Interacting with a database wouldn't be much use if we couldn't add data to it. Here you will learn how to insert records into a database using prepared statements.

- ➔ The INSERT Statement
- ➔ Using phpMyAdmin
- ➔ Inserting Information from a Form

SQL: UPDATE

This exercise will show you the SQL syntax for updating a record in a database as well as how to use a form to update user information including checkboxes and hidden fields.

- ➔ The UPDATE Statement
- ➔ Update Form
- ➔ Display Data in the Update Form
- ➔ Display Checkboxes
- ➔ Hidden Fields

SQL: DELETE

This exercise shows you how to delete records from a database.

- ➔ The DELETE Statement
- ➔ Deleting Rows from a Database
- ➔ Passing ID Variables in a URL

SQL: SEARCH

There are an enormous number of ways to search for information in a database. We will show how to perform a basic wildcard search on a column.

- ➔ Wildcard Searches
- ➔ Searching with a Form

Our outlines are a guide to the content covered on a typical class. We may change or alter the course topics to meet the objectives of a particular class.