



Course Code	Course Name	Credits
20MCACC109	Core Practical 4: Web Development using PHP	02

#### ❖ Aim of the Course:

- 1 The aim of this course is that students will be understanding web development concept using PHP programming language.

#### ❖ Course Overview and Context:

- 1 The course is divided into five units. The first unit covered the installation step and basic of PHP. Second unit covered the concept of the various functions and object-oriented PHP. The Third unit covered the concept of java script and JSON. Fourth unit covered the concept of Forms and MYSQL and fifth unit covered the concept of cookies, session and PHP MYSQL connectivity.

#### ❖ Course Outcomes:

Sr #	Course Outcome	Cognitive Level
1	Remember the installation of PHP and basic of PHP	Remember
2	Understand the functions and object-oriented PHP	Understand
3	Understand JavaScript and JSON	Understand
4	Understand Forms and MYSQL database	Understand Apply
5	Understand Cookies, session, file with PHP and MYSQL Connectivity	Understand Apply

#### ❖ Content of the Course:

##### Unit-1 Installation and Basics of PHP

- **Installing and Setting up Environment:** what is Wamp, mamp, lamp, Installing Xampp on windows and Linux, Setting permissions on linux, Important configuration files.
- **Basics:** HTTP & HTML, Request and Response procedure
- **PHP Overview:** The basics of PHP scripts, Beginning and Ending block of PHP, The echo statement and print (), Combining HTML and PHP, Comments in PHP
- **Variables:** Rules for defining variable in PHP, Super Global
- **Data Types:** Standard Data Types, Special Data Types, Data Type related Functions - gettype(), settype() Type casting
- **Operators & Expressions, PHP Operators:** Assignment, Arithmetic, Increment/Decrement, Comparison, logical, Ternary, string.
- Constants, variable variables, checking variable assignment, unset, predefined constants
- **Switching flow:** if, if...else, elseif, switch
- **Loops:** while, do-while, for, foreach, Break, continue

##### Unit-2 Functions and Object-Oriented PHP

- **Functions:** intro, calling function, defining function, returning values from UDF, variable scope, global statement, static statement, formal and actual parameters, default value argument, passing reference, checking function existence before calling, variable function, variable length argument function.
- **Arrays:** creating array, types of array, array related functions.
- **String:** formatting strings, argument swapping, storing formatted string, string functions
- Date and Time functions



- **JSON:** encode – decode
- **Object Oriented PHP:** basics of oop, defining class, creating object instance, magic class methods – mutator, accessor, constructor, destructor, copying objects, displaying objects, extending classes

### Unit-3 JavaScript and JSON

- **JavaScript:** a brief history, Advantages, comments, hiding javascript from older browsers, using js in different ways, datatypes, datatype conversion, dialog boxes
- Control structures & loops, user defined functions, basic javascript events – form events, mouse events, text events, keyboard events, text events
- **Javascript functions:** string, math, date & time, array functions.
- Validating form fields – login form validations, password matching, length validation, email field, date validation, (use of basic regular expressions).
- **JSON:** Overview, uses, syntax, datatypes

### Unit-4 Forms and MySQL

- **Forms:** creating form, accessing form input with user-defined array, combining html & php, hidden fields, redirecting user, Working with file uploads
- **MySQL - mysql datatypes, interacting mysql:** database, table creation, CRUD, Replace Join
- **Functions:** string, date & time, formatting date & time, date arithmetic, special date-time functions.

### Unit-5 Cookies, Files and Directories with PHP and MySQL

- **PHP & MySQL Interaction:** database support in php, using mysqli library, connecting database, closing connection, submitting queries, retrieving data, being prepared, checking for errors
- **Cookies:** Accessing cookie, setting cookie, deleting cookie Sessions: Starting session, working with session, storing multiple values in session, destroying session.
- **Files:** including files, Include & require, file related functions, creating & deleting files, file opening modes, reading & writing / appending files
- **Directories:** create, remove, read, close

### ❖ Learning Resources:

Sr #	Textbook   References   Internet Links
1.	Julie C. Meloni, "Sams Teach Yourself PHP, MySQL, Apache and All in One", Sams Publication, 5h Edition.
2.	Recharl Blum, "PHP, MySQL & JavaScript All-in-One for Dummies", Wiley
3.	Robin Nixon, "Learning PHP, MySQL & JavaScript" O'Reilly Media
4.	Paul Wilton, Jeremy McPeak, "Beginning JavaScript", Wrox

### ❖ Assignments (Optional):

Sr #	Description	Available From (Date)	Submission Date
1.	Basic of PHP, Functions and Object-oriented PHP	3 weeks	Within 10 Days
2.	Javascript, JSON, MYSQL	6 weeks	Within 7 Days