**Lesson Plan: PHP for Web Development beginners**

**Lesson 1: What is PHP?**

PHP, which stands for "Hypertext Preprocessor," is a widely used open-source scripting language that is primarily used for web development. It was created by Rasmus Lerdorf in the mid-1990s

**Lesson 2:Variables**

**Variables**

**Data types**

Interger

Float

Boolean

String

Date

Null

Array

Object

Convert

**Lesson 3: Mathematical and Conditional Statements**

**Mathematical Operations –** (+ - \* / %)

**If and else statements and Comparison operators (==, !=, >, <,)**

**Logical operators (AND, OR, NOT)**

**Loops (for, while)**

**Break and continue statements**

**Function parameters and return values**

**Lesson 4: arrays and functions**

**Iterating arrays**

**Working with multidimensional arrays**

**Array manipulation and common array functions**

**Push** - adds new items **to the end** of an array.

**Pop** - removes (pops) **the last element** of an array.

**Shift** - removes **the first item** of an array

**Unshift** - adds new elements to **the beginning** of an array.

**Special Functions in array**

**For each -** provides an easy way to iterate over arrays.

**array\_map() -** Sends each value of an array to a user-made function, which returns new values

**array\_filter() -** Filters the values of an array using a callback function

**array\_splice() -** changes the contents of an array by removing or replacing existing elements and/or adding new elements in place

**array\_slice()** **-** Returns selected parts of an array

**arsort() -** Sorts an associative array in descending order, according to the value

**asort() -** Sorts an associative array in ascending order, according to the value

**Lesson 5: Objects**

**Manipulation of object properties**

**Lesson 6: MYSQL QUERIES**

**What is MYSQL?**

**-**MySQL is an open-source relational database management system (RDBMS) that provides an efficient and reliable way to manage, store, and retrieve structured data.

**Setting up the mysql database**

**QUERIES**

INSERT - INSERT INTO `employee`(`employee\_id`, `firstname`, `middlename`, `lastname`, `status`, `leaves`, `date\_hired`) VALUES ('[value-1]','[value-2]','[value-3]','[value-4]','[value-5]','[value-6]','[value-7]')

SELECT - SELECT \* FROM `employee`

WHERE CLAUSE - SELECT \* FROM `employee` WHERE employee\_id = 1

LOGICAL OPERATORS (AND / OR NOT) - SELECT \* FROM `employee` WHERE firstname = ‘Allen’ AND lastname = ‘Young’

UPDATE - UPDATE `employee` SET `employee\_id`='[value-1]',`firstname`='[value-2]',`middlename`='[value-3]',`lastname`='[value-4]',`status`='[value-5]',`leaves`='[value-6]',`date\_hired`='[value-7]' WHERE 1

DELETE - DELETE FROM `employee` WHERE 0

Order by **-** SELECT \* FROM `employee` ORDER BY firstname ASC **/** DESC

Distinct - SELECT DISTINCT status FROM employee

SUM - SELECT status,SUM(leaves) FROM employee GROUP BY status

Max - SELECT max(leaves) FROM `employee`

Min - SELECT min(leaves) FROM `employee`

Concat - SELECT CONCAT(firstname,' ',lastname) FROM employee

Alias - SELECT CONCAT(firstname,' ',lastname) as thecombine FROM employee

group by - SELECT status FROM `employee` GROUP BY status

**THE INNER JOIN**

SELECT CONCAT(employee.firstname,' ',employee.lastname), salary.salary FROM employee INNER JOIN salary ON employee.employee\_id = salary.employee\_id;

**Application of MYSQL Queries to PHP**

**Prepared statements (avoiding sql injection)**

**Lesson: 7 Javascript to PHP**

**Receiving an ajax request and saving a database**

**Retrieving data from database using ajax request**

**Lesson 8: Sessions**

**What are sessions**

**How to use sessions**

**Lesson 9: File handling**

**How users could upload file**

**How users could retrieve the uploaded file**

**The final Output: LEAVE FILING SYSTEM**