

IT 239: Web Technology II

BIM 4th Semester

Credits:3
Lecture Hours: 48

Course Description:

This course covers different concepts of server-side Web development using PHP, MySQL, and server-side frameworks.

Course Objectives:

The main objective of this course is to provide students both theoretical and practical knowledge of different technologies that are used for server-side Web development.

Course Details

Unit 1: Introduction

10 LHs

Server-side Scripting; Setting Up Development Server; PHP Basics: Introduction, Syntax, Comments, Output, Variables, Constants, Data Types, Operators; Control Statements (if, switch, for, for each, while, do-while, break, and continue); Functions (Defining Functions, Passing Arguments, Returning Value from Functions); Including and Requiring Files; PHP Super global.

Unit 2: Strings and Arrays

6 LHs

String and String Functions; Array (Definition, Numerically Indexed Array, Associative Array, Multidimensional Array, Using for each loop, Multidimensional Arrays, Array Functions); Regular Expressions.

Unit 3: Object-Oriented Programming

10 LHs

OOP Terminologies; Defining Classes; Creating Objects; Constructor and Destructor; Access Modifiers; Inheritance; Constants; Abstract Classes; Interfaces; Static Methods and Properties; Namespace; Exception Handling.

Unit 4: File and Form Handling

5 LHs

Reading and Writing Files; Building forms; Retrieving and Processing Form Data.

Unit 5: Working with Database

5 LHs

Using PHP to Create Connection with Databases, Querying Databases, CRUD Operations Using Forms.

Unit 6: Cookies, Sessions and Authentication

4 LHs

Setting, Accessing, and Destroying Cookies; HTTP Authentication; Using Sessions (Starting, Ending, Setting a Timeout, and Session Security).

Unit 8: Server-Side Web Framework

8 LHs

Basics of any one Server-Side Web Framework.

Laboratory Works:

The laboratory work includes creating dynamic web pages using PHP, MySQL, and server-side web frameworks.

Suggested Readings

Learning PHP, MySQL and JavaScript: A Step-by-Step Guide to Creating Dynamic Websites, Robin Nixon, O'reilly.

PHP & MYSQL: Server-side Web Development, Jon Duckett, John Wiley & Sons, Inc.

Murach's PHP and MySQL, Joel Murach and Ray Harris, Mike Murach and Associates, Inc.

Programming PHP: Creating Dynamic Web Pages, Kevin Tatroe , Peter MacIntyre, O reilly.

www.w3schools.com