# Web Development Course Module Handbook

**Credit Hours:**

Equivalent to 1.5+ 1.5 credit hour course.

**Pre-requisite(s):**

Basic knowledge of computers and the internet.

**Course Type:**

Core for BSCS, IT. Can be taught as a skill development course.

**Course Duration:**

12 Weeks.

**Weekly Sessions:**

- 2 Lectures (90 Minutes)

- Lab (1 sessions of 0.5 hours)

**Course Style:**

The course will be delivered mostly in a classroom and lab environment with hands-on coding exercises.

**Course Description**

This course introduces students to web development technologies, starting from the basics of HTML and CSS, moving to JavaScript for interactive and dynamic content, and covering server-side programming with PHP and MySQL. It ends with a full-stack application developed using the Laravel framework. Students will learn to build functional, responsive websites, manipulate the DOM, handle asynchronous requests, and create a complete web application with a database backend. By the end of the course, students will be able to create and deploy web projects using modern best practices.

**Objectives**

By the end of the course, students will be able to:

- Understand HTML, CSS, and JavaScript fundamentals.

- Manipulate the DOM to make dynamic web pages.

- Handle asynchronous requests using JavaScript (fetch API).

- Use PHP for server-side programming and interact with a MySQL database.

- Create a full-stack web application using the Laravel framework.

- Understand basic concepts of web hosting and deployment.

**Course Learning Outcomes**

- Build responsive websites using HTML and CSS.

- Add interactivity using JavaScript.

- Work with APIs and handle asynchronous tasks in JavaScript.

- Build dynamic web pages using PHP and MySQL.

- Develop full-stack web applications using Laravel.

**Course Structure**

1. Presentation by Instructor

2. Class Activities

3. Assignments

4. Quiz

5. Labs

6. Case Studies and Reading Material

7. Videos

**Course Outline**

|  |  |  |
| --- | --- | --- |
| Week | Lectures | Topics/ Sub - Topics |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |
| 11 |  |  |
| 12 |  |  |

**Tentative Grading Distribution and Policy**

|  |  |  |
| --- | --- | --- |
| Criteria | Weightage | Policy |
| Assignment |  |  |
| Quizzes |  |  |
| Labs |  |  |
| Portfolio Website |  |  |
| Final Project |  |  |

**Attendance Requirements**

Students are required to attend all lectures and lab sessions.

**Text and Other Resources**

**Textbook**

"HTML and CSS: Design and Build Websites"\_ by Jon Duckett

**Other Resources**

[W3Schools] ( <https://www.w3schools.com/> )

[MDN Web Docs]( <https://developer.mozilla.org/en-US/> )