Course Code	Course Title			Category	
Cont	tact Hours per W	veek			
L	Т	D/P	CA	FE	Credits

Prerequisite: Fundamentals of Programming

Course Objectives:

- 1. To introduce advanced web Technologies.
- 2. To develop the skills in using recent web technology software for the development of projects
- 3. To develop the skills in applying web technologies appropriately.

Course Outcomes:

At the end of the course, the student shall be able to

CO:1- Develop the modern web pages using the HTML5 and CSS3 features with different layouts as per need of applications.

- CO:2- Use the Advance JavaScript to develop the dynamic web pages.
- CO:3- Use server-side scripting with PHP and frameworks to generate the web pages dynamically using the database connectivity.
- CO:4- Develop the modern Web applications using client and server-side technologies and web design fundamentals

Learning Resources

Text Books:

- 1. Programming the World Wide Web Robert W. Sebesta, 4th Edition, Pearson Education, 2008
- 2. Harvey & Paul Deitel & Associates, Harvey Deitel and Abbey Deitel, "Internet and World Wide Web How To Program", Fifth Edition, Pearson Education, 2011.

Adam Bretz & Colin J Ihrig, —Full Stack Javascript Development with MEANI, SPD, ISBN-13: 978-0992461256

Reference Books:

1. Web Technologies- Jeffery C. Jackson, ISBN 978-81-317-1715-8 Pearson 2015 Advance PHP Programming - George Schlossnagle- ISBN 0-672-32561-6,2004

Sr No.	Name of Experiment/Assignment	CO
1	Develop a to-do list application where users can add tasks, mark them as completed, and remove them. Use HTML for the layout, CSS for styling, and JavaScript for handling user interactions and task management.	
2	Design a responsive navigation bar that changes its appearance and behaviour based on the user's scroll position. Implement animations, such as sliding or fading, as the user scrolls up or down the webpage.	CO1, CO2
3	Create a task management application with drag-and-drop functionality. Users can move tasks between different boards (e.g., To Do, In Progress, Done) using drag-and-drop interactions. Implement persistence using local storage.	CO2, CO3
4	Develop a webapplication in PHP using various concepts of object-oriented programming like Class, Object, Inheritance, Function, Overloading, Constructor, and Destructor	CO1, CO3
5	Build a user dashboard using the CodeIgniter framework. Users can register, log in, and access a personalized dashboard. Implement features like user profile management, password reset, and activity logs	CO1, CO3
6	Develop a web scraper to mine structured data from any website according to a given application.	CO2, CO3
7	Build a real-time search engine that allows users to search for content (e.g., articles, products) as they type. Fetch search results from a backend API using AJAX requests. Display search suggestions and results dynamically.	CO3

8	Create a personal portfolio website using Bootstrap. Design and implement sections for your bio, skills, projects, and contact information. Utilize Bootstrap components for navigation bars, modals (for project details), and responsive grid layout.	CO4
9	Use Bootstrap for styling and React for the front end to create a task management application. Users should have a smooth and attractive user experience when adding, removing, and marking jobs as finished using the app.	CO3, CO4
10	Create a complaint management system that enables consumers to register grievances with various departments. The concerns might then be reassigned by administrators to particular departments for handling. Use your preferred backend, Bootstrap for styling, and React for the front end.	CO3
11	Convert an existing static website to a responsive one using Bootstrap.	CO3, CO4