

Academic Lesson Plan of Winter 2026

Department : CSE	Semester : 5TH	Name of the teaching faculty: SHIBANI MADHUSMITA SAHOO
Subject: Web Technologies	No. of days/per week class allotted . 3p/week.	Semester from : 1ST July 2026
		No. of weeks:15 weeks
		Topics to be covered:
1 st week	1 st	Introduction to www, Protocols and programs
	2 nd	secure connections, application and development tools, the web browser
	3 rd	what is server, setting up UNIX
2 nd week	1 st	LINUX web servers
	2 nd	Logging users, dynamic IP Web Design
	3 rd	Logging users, dynamic IP Web Design
3 rd week	1 st	Website design principles
	2 nd	planning the site and navigation
	3 rd	Architecture of Web based systems client/server (2-tier) architecture
4 th week	1 st	Architecture of Web based systems client/server (2-tier) architecture
	2 nd	3-Tier architecture
	3 rd	3-Tier architecture
5 th week	1 st	Building blocks of fast and scalable data access Concepts
	2 nd	Caches-Proxies- Indexes-Load Balancers- Queues
	3 rd	Web Application architecture (WAA)
6 th week	1 st	Web Application architecture (WAA)
	2 nd	Client-side scripting
	3 rd	Client-side scripting
7 th week	1 st	what is JavaScript
	2 nd	simple JavaScript
	3 rd	variables, functions
8 th week	1 st	variables, functions
	2 nd	conditions, loops and repetition
	3 rd	conditions, loops and repetition
9 th week	1 st	JavaScript and objects, JavaScript own objects
	2 nd	DOM and web browser environments, forms and validations
	3 rd	DHTML: Combining HTML, CSS and JavaScript, events and buttons, controlling your browser
10 th week	1 st	Introduction advantages & disadvantages, Ajax based web application, alternatives of Ajax
	2 nd	XML, XSL and XSLT
	3 rd	Introduction to XML, uses of XML, simple XML, XML key components
11 th week	1 st	DTD and Schemas, XML with application, XSL and XSLT
	2 nd	Introduction to Web Services
	3 rd	Server-side scripting, Arrays, function and forms
12 th week	1 st	advance PHP Databases - Basic command with PHP examples
	2 nd	Connection to server, creating database
	3 rd	selecting a database, listing database, listing table names creating a table, inserting data
13 th week	1 st	altering tables, queries
	2 nd	deleting Database
	3 rd	deleting data and tables
14 th week	1 st	PHP my admin and database bugs
	2 nd	Introduction to Modern Frameworks
	3 rd	React, Angular
15 th week	1 st	Node JS
	2 nd	Bootstrap
	3 rd	Tailwind CSS

COURSE OUTCOMES

CO.1	Explain the fundamentals of the World Wide Web (WWW), web protocols, web servers, website design principles, and web system architectures.
CO.2	Develop interactive client-side web applications using JavaScript, including variables, functions, control structures, objects, and DOM manipulation.
CO.3	Design dynamic and responsive web pages by integrating HTML, CSS, JavaScript, AJAX, XML, and related web technologies.
CO.4	Create server-side web applications using PHP and perform database operations such as creating, querying, updating, and managing databases.
CO.5	Apply modern web development frameworks and tools, including React, Angular, Node.js, Bootstrap, and Tailwind CSS, to build scalable and user-friendly web applications.

Shebani Madhusmita Sahoo

Signature of Faculty



HOD, CSE