Name of Faculty	:	Faculty of Computer Science & Applications
Name of Program	:	Bachelor of Computer Applications in Data Science
Course Code	:	1BCA03
Course Title	:	Web Technology
Type of Course	:	Professional Core
Year of Introduction	:	2023-24

Prerequisite	:	-
Course Objective	:	The increasing use of Internet and WWW encourages everyone to use web- based solutions for their requirements. Web technology refers to the methods by which End-user devices like computers/mobiles communicate with each other. This communication involves the use of web publishing languages like HTML, CSS, JavaScript. This subject will attempt to give you a basic understanding of various aspects of web technologies.
Course Outcomes	:	At the end of this course, students will be able to:
	CO 1	To understand and compare the fundamentals of Web hosting and domain nameservices. (Analysis)
	CO 2	To understand various non-browser specific web design principles. (Knowledge)
	CO 3	To understand the need and be able to develop HTML/XHTML and CSS pages withvalid structure as well as content. (Synthesis)
	CO 4	To understand and be able to develop JavaScript/jQuery code to access the DOMstructure of web document and object properties.

Teaching and Examination Scheme

Teaching Scheme (Contact Hours)			Credits	Examination Marks				
				Theory Marks		Practical Marks		Total Marks
L	T	P	C	SEE	CIA	SEE	CIA	
2	0	4	4	50	25	50	25	150

*Legends: **L**-Lecture; **T**–Tutorial/Teacher Guided Theory Practice; **P** – Practical, **C** – Credit, **SEE** – Semester End Examination, **CIA** - Continuous Internal Assessment (It consists of Assignments/Seminars /Presentations/MCQ Tests, etc.))*

Course Content

Unit No.	Topics	Teaching Hours	Weightage	Mapping With CO
1.	**HTML:** Basics of HTML, HTML Tags and attributes, Meta tags, Character entities, hyperlink, lists, tables, images, forms, divs, XHTML	5	20%	CO 1 CO 2 CO 3
2.	**CSS:** Basics of CSS, CSS properties for manipulating texts, background, colors, Gradients, Shadow Effects, borders, margins, paddings, transformations, transitions, and animations, etc., CSS box modal and CSS Flex, Positioning systems of CSS, CSS media queries.	5	20%	CO 1 CO 2 CO 3
3.	**JavaScript:** Basics of JavaScript and Client-side scripting language, JavaScript syntaxes for variables, functions, branches and repetitions. JavaScript alert, prompt and confirm. Objects in JavaScript, Access/Manipulate web browser elements using DOM Structure, forms and validations, JavaScript events,	10	30%	CO 2 CO 4
4.	**JQuery:** Basics of jQuery, jQuery syntaxes, jQuery selectors, events, effects, Access/Manipulate web browser elements using jQuery	5	15%	CO 2 CO 4
5.	**Bootstrap:** Introduction, different components, grid, plug-in	5	15%	CO 2 CO 4

Suggested Distribution of Theory Marks Using Bloom's Taxonomy						
Level	Remembrance	Understanding	Application	Analyse	Evaluate	Create
Weightage	**30**	**30**	**40**	-	-	-

NOTE: This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Suggested List of Experiments/Tutorials

Sr. No.	Name of Experiment/Tutorial	Teaching Hours
1	Write a HTML program for demonstrating Hyperlinks. a. Navigation from one page to another. b. Navigation within the page.	8
2	Write a HTML program for time-table using tables.	8
3	Write a HTML program to develop a static Home Page using frames.	4
4	Write a HTML program to develop a static Registration Form.	4
5	Write a HTML program to develop a static Login Page.	4
6	Write a HTML program to develop a static Web Page for Catalog.	4
7	Write a HTML program to develop a static Web Page for Shopping Cart.	4

8	Write HTML for demonstration of cascading stylesheets. a. Embedded stylesheets. b. External stylesheets. c. Inline styles.	4
9	Write a JavaScript program to validate USER LOGIN page.	4
10	Write a JavaScript program for validating REGISTRATION FORM	4
11	jQuery: Disable right click menu in html page	4
12	jQuery: Fix broken images automatically	4
13	Any 5 Bootstrap Experiment	4

Major Equipment/ Instruments and Software Required

Sr. No.	Name of Major Equipment/ Instruments and Software
1	Web browser
2	Notepad / Sublime text / Visual studio code

Suggested Learning Websites

Sr. No.	Name of Website
1	https:// www.w3schools.com/
2	https:// www.tutorialspoint.com/

Text books

Sr. No.	Name of Text Books
1	Black Book, HTML 5, Dreamtech Press
2	Black Book, Web Technologies, Dreamtech Press

References Books:

Sr. No.	Name of Reference Books
1	Ralph Moseley and M. T. Savaliya, Developing Web Applications, Wiley-India
2	Cody Lindley, jQuery Cookbook, O'Reilly Media
3	Ryan Benedetti, Ronan Cranley, Head First jQuery - A Brain-Friendly Guide, O'Reilly Media