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Programme Name/s	**: Artificial Intelligence/ Artificial Intelligence and Machine Learning/ Cloud Computing and Big Data/ Computer Technology/ Computer Engineering/ Computer Science & Engineering/ Data Sciences/ Computer Hardware & Maintenance/ Information Technology/ Computer Science & Information Technology**
Programme Code	**: AI/ AN/ BD/ CM/ CO/ CW/ DS/ HA/ IF/ IH**
Semester	**: Second**
Course Title	**: WEB PAGE DESIGNING**
Course Code	**: 312004**

I. RATIONALE

Web Page Design is used to develop online applications for various organizations such as organizational and educational websites, virtual learning environments, business applications in various fields such as products, sales, banking railways reservation, services etc. Web pages are categorized into two namely: static and dynamic web page. This course introduces web page design using HTML5 and also give emphasis on learning Cascading Style Sheets (CSS) which is a style sheet language used for describing the presentation of a document written in a markup language for formatting and styling of content.

II. INDUSTRY / EMPLOYER EXPECTED OUTCOME

The aim of this course is to help the student to attain the following industry identified outcomes through various teaching learning experiences :
Develop and host the static website as per industry requirement.

III.   COURSE LEVEL LEARNING OUTCOMES (COS)

Students will be able to achieve & demonstrate the following COs on completion of course based learning

- CO1 - Use HTML formatting tags to present content on web page.
- CO2 - Develop web page using list and hyperlinks.
- CO3 - Develop web pages using images, colors and backgrounds.
- CO4 - Design HTML forms using table and frames.
- CO5 - Apply presentation schemes on content using CSS.
- CO6 - Publish websites on internet or intranet.

IV. TEACHING-LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Abbr	Course Category/s	Learning Scheme						Assessment Scheme											
				Actual Contact Hrs./Week			SLH	NLH	Credits	Paper Duration	Theory				Based on LL & TL				Based on SL		Total Marks
															Practical						
				CL	TL	LL					FA-TH	SA-TH	Total		FA-PR		SA-PR		SLA		
											Max	Max	Max	Min	Max	Min	Max	Min	Max	Min	
312004	WEB PAGE DESIGNING	WPD	SEC	2	-	4	2	8	4	-	-	-	-	-	50	20	50@	20	25	10	125

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Total IKS Hrs for Sem. : Hrs

Abbreviations: CL- ClassRoom Learning , TL- Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS - Indian Knowledge System, SLA - Self Learning Assessment

Legends: @ Internal Assessment, # External Assessment, *# On Line Examination , @$ Internal Online Examination

Note :

1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.
2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.
3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.
4. Notional Learning hours for the semester are (CL+LL+TL+SL)hrs.* 15 Weeks
5. 1 credit is equivalent to 30 Notional hrs.
6. * Self learning hours shall not be reflected in the Time Table.
7. * Self learning includes micro project / assignment / other activities.

V. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT

Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.
1	TLO 1.1 Differentiate characteristics of the given type of web sites. TLO 1.2 State structure of the given HTML page. TLO 1.3 Explain use of Head tag and body tag in the given web page. TLO 1.4 Explain the procedure of using the given block level tag on a web page. TLO 1.5 Write the procedure of using the given Text level tag and use of special characters in web page.	**Unit - I Introduction to HTML** 1.1 Introduction of HTML 1.2 Terminologies used in Web Design: World Wide Web (www), Web Pages, Web Site, Web Browsers, Web Servers and types of sites. Static vs. dynamic web sites, Search Engine. 1.3 Web page structure: DOCTYPE, HTML, TITLE, HEAD, BODY and other meta tags with attributes. 1.4 Block Level Elements: Headings, Paragraphs, Breaks, Divisions, Centered Text, Block Quotes, Preformatted text, types of Address, HR tag. Horizontal Rue. 1.5 Text Level Elements: Bold, Italic, Teletype, Underline, Strikethrough, Superscript, Subscript, DIV tag, displaying special characters, comments.	Presentations Hands-on
2	TLO 2.1 Explain use of the given type of list in Web Pages. TLO 2.2 Enlist different types of Links.	**Unit - II Lists and Links** 2.1 Lists: Ordered Lists, Unordered Lists, Definition Lists, Nested Lists. 2.2 Links: Absolute, Relative and Inline links, use image as link, link to an email address, button as link, types of links, linking various documents for internal and external links, to link different web page of same site, link different location on the same web page, a specific location on different web page of same site, to specific section within the document, inserting E-mail link.	Presentations Hands-on

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Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.
3	TLO 3.1 Describe the given image attribute on a web page and describe HSPACE & VSPACE TLO 3.2 Explain process of using the given colors/images as page background on a web page.	**Unit - III Images, Colors and Background** 3.1 Image: Types of image format, jpg, bmp, png gif etc. IMG tag, alternate text, image alignment, HSPACE, VSPACE, wrapping text, height and width of images, Image as a link, Inserting Images, formatting image for sizing, alignment. Border and using other attributes with IMG tag. 3.2 Colors and Backgrounds: The text color, color attribute of FONT tag, text attribute of BODY tag. bgcolor attribute of BODY tag, changing link colors: link, alink, vlink, attributes of BODY tag, Backgrounds: Inserting image as page background, background attributes of BODY tag, creating solid color page background.	Presentations Hands-on
4	TLO 4.1 Explain the given table attributes to organize data on a web page and table setting. TLO 4.2 Enlist different types of table attributes. TLO 4.3 Describe the given type of 'frame' with examples and procedure to organize display as per given screen layout using frames. TLO 4.4 Create basic form using different form fields and Button tags.	**Unit - IV Table, Frames and Forms** 4.1 Table: Table tag with attributes. TABLE, <tr>, <th>, <td> tags. Border, cell spacing, cell padding, width, align, bgcolor attributes. Adding captions: CAPTION tag 4.2 Formatting contents in the table cells: align, valign, bgcolor, height, width, nowrap attributes. Spanning rows and columns: rowspan and colspan attributes. 4.3 Frames: Types of Frames with their attributes, Creating frames: FRAMESET tag – rows, cols attributes, FRAME tag – name, frame border, margin height, margin width, src, resize, scrolling Attributes, Use of NOFRAMES tag, Frame targeting. 4.4 Forms: Creating basic form: FORM tag, action and method attributes, Form fields: Single line text field, password field, multiple line text area, radio buttons, and check boxes. Pull down menus: SELECT and OPTION tags. Buttons: submit, reset and generalized buttons. Formatting technique: Using table to layout form.	Presentations Hands-on

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Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.
5	TLO 5.1 Explain CSS code for the given type of formatting on a web page with different CSS properties. TLO 5.2 Write the procedure to create CSS for applying the given presentation scheme on a web page. TLO 5.3 Enlist different CSS advanced properties. TLO 5.4 State different types of CSS responsive attributes.	**Unit - V Cascading Style sheets** 5.1 Cascading Style Sheets: Different types of Style Sheets, Benefits of using CSS. Adding style to the document: Linking to style sheets, Embedding style sheets, Using inline style, Selectors: CLASS rules, ID rules. 5.2 Style sheet properties: Font, text, box, color and background properties; Creating and Using a simple external CSS file; Using the internal and inline CSS; background and color gradients in CSS Setting font and text in style sheet using table layout. 5.3 5.3. CSS Advanced: CSS Rounded Corners ,CSS Border Images, CSS Shadows, CSS Text Effects,CSS 2D Transforms, CSS 3D Transforms, CSS Transitions, CSS Animations,CSS Tooltips, CSS Style Images, CSS Image Reflection. 5.4 CSS Responsive: RWD Intro, RWD Viewport, RWD Grid View, RWD Media Queries, RWD Images, RWD Videos, RWD Frameworks, RWD Template.	Presentations Hands-on
6	TLO 6.1 Explain the procedure to configure a webserver and hosting the given website.	**Unit - VI Website Hosting** 6.1 Website Hosting: Concept of Internet and Intranet. Publishing website on Intranet, installing and configuring web server, uploading files on intranet site, access intranet based website, publishing website site on Internet, hiring web space, uploading files using FTP, virtual hosting, access internet based website.	Presentations Video Demonstrations

VI. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL / TUTORIAL EXPERIENCES.

Practical / Tutorial / Laboratory Learning Outcome (LLO)	Sr No	Laboratory Experiment / Practical Titles / Tutorial Titles	Number of hrs.	Relevant COs
LLO 1.1 Create web page using structure tags to display sample message.	1	* Work with basic HTML tags.	2	CO1
LLO 2.1 Create a web page which display a string "Maharashtra State Board of Technical Education,Mumbai" in all < h1> to <h6> header tags.	2	* Use of heading tags in web page.	2	CO1
LLO 3.1 Design a web page with two paragraphs each of 8-10 lines. Assign title to web page. Practice formatting tags for bold, italics, underline, center, break, space, horizontal lines, span tag, pre tag etc	3	* Work on paragraph in web page.	2	CO1
LLO 4.1 Create a web page for displaying a paragraph using block level tags, HR tags.	4	* Work with block level tags in web page.	2	CO1
LLO 5.1 Create a web page using text level tags.	5	* Work with text level tag in web page.	2	CO1
LLO 6.1 Create a web page to insert a border property in html statements.	6	* Implement the border properties in web page.	2	CO1

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Practical / Tutorial / Laboratory Learning Outcome (LLO)	Sr No	Laboratory Experiment / Practical Titles / Tutorial Titles	Number of hrs.	Relevant COs
LLO 7.1 Create a web page using special characters.	7	Use of Special characters in Web page.	2	CO1
LLO 8.1 Design a web page for implementing ordered list and unordered list.	8	* Work with ordered and unordered List.	2	CO2
LLO 9.1 Design a web page for implementing 1. Ordered list within unordered list 2.Unordered list within ordered list 3.Ordered list within ordered list 4.Unordered list within unordered list	9	* Create a web page to use different types list in web page.	4	CO2
LLO 10.1 Create a web page to link: 1. A different web page of same site 2.A different location on the same web page 3. A Specific location on different web page of same site	10	* Work on HTML web page link.	2	CO2
LLO 11.1 Create web page to link: 1. An external page of different web site 2. To an e-mail ID	11	* Use of links in web page.	2	CO2
LLO 12.1 Create a webpage which includes photos and align with the ALT property on the left, right, and center. LLO 12.2 Create a webpage to set picture in left, right, and middle alignment.	12	* Use of links with images in web page.	2	CO2
LLO 13.1 Demonstrate to change colors of links on web page.	13	* Use of colors for links in web page.	2	CO2
LLO 14.1 Insert images on web page using various attributes and set image as background.	14	* Insert image on web page foreground and background with various attributes.	2	CO3
LLO 15.1 Create a webpage containing any image and add a hyperlink to another webpage. Use width and height property for an image.	15	* Insert image with hyperlink and set image width and height property of image.	2	CO3
LLO 16.1 Create a web page with background properties •Set the background color of the page to line n. •Set border to h1 tag. •Set background image to a page and to a paragraph.	16	* Work with different background properties in web page.	4	CO3
LLO 17.1 Create a web page to implement Table	17	* Work on HTML table in web page.	2	CO4
LLO 18.1 Create table within table and also insert an image within the data elements of the table.	18	* Create table within table and insert images in tables.	2	CO4
LLO 19.1 Create a webpage that displays first year timetable. Make effective use of rowspan and colspan attributes. Make use of <th> tag.	19	* Work on row and column attributes of table.	2	CO4
LLO 20.1 Create a web page to implement frame tags.	20	* HTML Frame in web page.	2	CO4

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Practical / Tutorial / Laboratory Learning Outcome (LLO)	Sr No	Laboratory Experiment / Practical Titles / Tutorial Titles	Number of hrs.	Relevant COs
LLO 21.1 Create a webpage that provides a form for filling information. The webpage must contain following elements: • Textbox • Radio buttons • Checkboxes LLO 21.2 Create a webpage that provides a form for filling information. The webpage must contain following elements: • Buttons (Submit/Reset) • Text area • Textbox for passwords	21	* Create different elements in web page.	4	CO4
LLO 22.1 Create a web page for demonstration of CSS by applying internal style, external and inline style.	22	* Create CSS by applying style sheets.	4	CO5
LLO 23.1 Create a web page for demonstration of CSS responsive web design.	23	* Work on RWD(Responsive Web Design) Templates in HTML.	2	CO5
LLO 24.1 Create a website and host on open source.	24	* Hosting of website on open source platform.	4	CO6
LLO 25.1 Create a web page to represent personal portfolio.	25	* Create a web site to represent portfolio	2	CO6

Note : Out of above suggestive LLOs -
- '*' Marked Practicals (LLOs) Are mandatory.
- Minimum 80% of above list of lab experiment are to be performed.
- Judicial mix of LLOs are to be performed to achieve desired outcomes.

VII. SUGGESTED MICRO PROJECT / ASSIGNMENT/ ACTIVITIES FOR SPECIFIC LEARNING / SKILLS DEVELOPMENT (SELF LEARNING)

Assignment

- ---

Self-Learning

- Following are some suggestive self-learning topics or similar self learning topics could be added by the concerned faculty: • Insert Video in an HTML page. • Create an animation using various HTML tags. • Create an E-mail Newsletter. • Contribute to an open source project.

Micro project

- The microproject has to be industry based application, internet-based, workshop-based, laboratory-based or field-based or as suggested by Teacher. • Create a music store web page, where the first step is to create a music page to include an appropriate background image and brief description contents. Different menus along with the list of songs according to attributes like genere, year, singer, album etc. can be found header part of the page. Also include link of registration form. • Build a static web page that displays information about an event Webinar. The event page will includes event location with image, photographs, list of speakers and photographs with links will be in the header

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section. Divided the page into smaller sections. Apply appropriate background color, font, style as per the web page. •
Develop any other website of Student's / Faculty's Choice.

VIII. LABORATORY EQUIPMENT / INSTRUMENTS / TOOLS / SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	• Computer system with all necessary peripherals and internet connectivity. • Any Office Software • Any browser	All

IX. SUGGESTED WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE (Specification Table)

Sr.No	Unit	Unit Title	Aligned COs	Learning Hours	R-Level	U-Level	A-Level	Total Marks
1	I	Introduction to HTML	CO1	4	0	0	0	0
2	II	Lists and Links	CO2	4	0	0	0	0
3	III	Images, Colors and Background	CO3	6	0	0	0	0
4	IV	Table, Frames and Forms	CO4	6	0	0	0	0
5	V	Cascading Style sheets	CO5	6	0	0	0	0
6	VI	Website Hosting	CO6	4	0	0	0	0
		Grand Total		**30**	**0**	**0**	**0**	**0**

X. ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)

• Continous assessment based on process and product related performance indicators.Each practical will be assessed considering-
-60% weightage to process
-40% weightage to product

Summative Assessment (Assessment of Learning)

• • End of Term Examination (Lab. performance),Viva-voce

XI. SUGGESTED COS - POS MATRIX FORM

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)		
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2	PSO-3
CO1	1	-	-	1	-	-	1			

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CO2	1	-	1	1	1	-	2			
CO3	1	-	2	1	1	-	2			
CO4	1	1	2	1	1	-	3			
CO5	2	2	2	1	3	3	3			
CO6	3	2	2	2	3	3	3			

Legends :- High:03, Medium:02,Low:01, No Mapping: -
*PSOs are to be formulated at institute level

XII.   SUGGESTED LEARNING MATERIALS / BOOKS

Sr.No	Author	Title	Publisher with ISBN Number
1	Web Publishing with HTML and CSS	Lemay Colburn	Pearson, ISBN-13: 978-0-672-33623-2
2	HTML and CSS Complete Reference	Thomos Powell	Tata McGraw Hill ,ISBN-978-0-07-174170-5
3	Kogent Learning Solutions Inc.	HTML5 BLACK BOOK	Wiley India Pvt. Limited, ISBN-9789350040959, 9350040956

XIII .   LEARNING WEBSITES & PORTALS

Sr.No	Link / Portal	Description
1	https://www.geeksforgeeks.org/	Designing web page, Introduction of html
2	https://www.w3schools.com/html/html_blocks.asp	Block Level Tag
3	https://www.javatpoint.com/html-frame-tag	Frames in HTML
4	https://www.w3schools.com/css/default.asp	CSS Stylesheet , CSS Advanced

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