

Programme Name : Artificial Intelligence and Machine Learning / Computer Engineering / Information Technology

Programme Code : AN / CO / IT

Course Code	Course Title	Course Abbr.	Semester
7R105	Web Page Designing	WPD	FIRST

I. RATIONALE

Website development includes the task of designing web pages and then formatting those web pages along with giving them a fine look. HTML is a mark-up language that creates web pages and Cascading Style Sheets (CSS) is used for formatting and styling the content of web pages. HTML along with CSS is used for Web Page Designing. This course focuses on creating web pages by using HTML contents also CSS components are used for giving those web pages a proper presentation. This course enables students to design static websites using HTML.

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: **Design and develop web pages using HTML and CSS.**

III. COURSE LEVEL LEARNING OUTCOMES (COS)

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

CO1 - Identify static and dynamic websites.

CO2 - Identify static and dynamic websites.

CO3 - Develop a web page that contains hyperlinks and background images.

CO4 - Write HTML code to show different kinds of tables and frames on a web page.

CO5 - Create a web page for login & student registration using form tag and apply CSS to it.

IV. TEACHING-LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Abbr	Course Category/s	Learning Scheme						Credits	Assessment Scheme														Total Marks
				Actual Contact Hrs. / Week	SL		NL		Paper Duration		Theory				Based on LL & TSL				Based on SL						
															Practical										
											CL	TL	LL	FA-TH	SA-TH	Total		FA-PR			SA-PR		SLA		
					Max	Min	Max	Min										Max	Min	Max	Min				
7R105	Web Page Designing	WPD	DSC	2	-	4	-	-	6	3	-	-	-	-	-	50	20	50@	20	-	-	100			

Total IKS Hrs. for Sem. : 0 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 - SelfLearning Assessment
Legends: @ Internal Assessment, # External Assessment, *# Online Examination, @\$ Internal Online Examination

Note :

1. FA-TH represents average of two Progressive 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 course.
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 Timetable.
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	<p>TLO 1.1 Differentiate the characteristics of the given type of web sites.</p> <p>TLO 1.2 Describe structure of the given HTML page.</p>	<p>Unit – I: Basics of HTML</p> <p>1.1 Fundamentals of World Wide Web (www): Information about web browsers, Web servers and types of sites. Static Vs. dynamic web sites. Web page structures: DOCTYPE, HEAD, TITLE, BODY and other Meta tags with attributes.</p> <p>1.2 Block level tags and Horizontal Rules: Headings, Paragraphs, Breaks, Divisions, Centered text, Block quotes, preformatted text, types of address, HR tags.</p>	Chalk Board/ White Board/ Hands-on Demonstration/ Presentations
2	<p>TLO2.1. Describe use of given special characters in creating web page.</p> <p>TLO2.2. Use relevant tag to display the given special characters.</p>	<p>Unit – II: Text level Tags and Lists</p> <p>2.1 Text level tags and special characters: Bold, Italic, Teletype, Underline, Strikethrough, Superscript, Subscript, DIV tag, displaying special characters.</p> <p>2.2 Lists: Ordered lists, Unordered lists, Definition lists, Nested lists.</p>	Chalk Board/ White Board/ Hands-on Demonstration/ Presentations
3	<p>TLO3.1. Describe feature of the given type of URL.</p> <p>TLO3.2. Describe the given image attribute on a web page.</p>	<p>Unit –III: URL and Images</p> <p>3.1 URL and Anchor Tag: URL types – Absolute URLs, Relative URLs. Advantage and disadvantage of absolute and relative URLs. Anchor tag – Linking various documents for internal and external links.</p> <p>3.2 Images, Colors and Backgrounds: Inserting images, formatting image for sizing, alignment, Border and using other attributes with IMG tag. Inserting image as a page background. Creating solid color page background.</p>	Chalk Board/ White Board/ Hands-on Demonstration/ Presentations
4	<p>TLO4.1. Explain the given table attributes to organize data on a web page.</p> <p>TLO4.2. Use the given table attributes to change default table setting.</p>	<p>Unit – IV: Table and Frames</p> <p>4.1 Table - Table tag with attributes. TABLE, TR, TH, TD tags. Border, cell spacing, cell padding, width, align, bgcolor attributes.</p> <p>4.2 Frames - Types of frames with their attributes, creating frames: Frame set tag – rows, cols, attribute. Frame tag - name, frame border, margin height, margin width, src, resize, scrolling attributes.</p>	Chalk Board/ White Board/ Hands-on Demonstration/ Presentations

5	TLO 5.1 Design HTML form using form tag. TLO 5.2 Describe CSS code for the given type of formatting on a web page. TLO 5.3 Describe the given style sheet properties. TLO 5.4 Illustrate embedding style sheets. TLO 5.5 Define Selectors of CSS. TLO 5.6 Enlist the benefits of using CSS. TLO 5.7 Explain inline CSS. TLO 5.8 Demonstrate Select and Option tag.	Unit – V: HTML Forms and CSS 5.1 Creating basic form: FORM tag, action and method attributes. 5.2 Form fields: Single line text field, password field, multiple line text area, radio buttons, and check boxes. 5.3 Pull down menus: SELECT and OPTION tags 5.4 Buttons: submit, reset and generalized buttons. 5.5 Cascading Style Sheets: Different types of style sheets, Benefits of using CSS. 5.6 Adding style to the document: Linking to style sheets, embedding style sheets, using inline sheets. 5.7 Selectors – CLASS rules, ID rules. 5.8 Style sheet properties: font, text, box, color and background properties.	Chalk Board/ White Board/ Hands-on Demonstration/ Presentations
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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 Identify difference between static & dynamic websites.	1*	Study different static web site & dynamic web site.	2	CO 1
LLO 2.1 Explain use of HEAD tag and BODY tag in web page.	2*	Create a web page for displaying a paragraph using block level tags. HR tags.	2	CO 2
LLO 3.1 Describe the procedure of using basic block level tags in web page.	3	Create a web page for displaying student information like Student name, roll number, branch, phone number, address etc.	2	CO 2
LLO 4.1 Use relevant tags to display the given special characters.	4*	Create a page to show different character formatting (B, I, U, SUB, SUP) tags. Display following statement on webpage: - $C_6H_{12}O_6 + 6O_2 = 6CO_2 + 6H_2O$ - $\log_b m^p = p \log_b m$	2	CO 2
LLO 5.1 Explain use of given type of list in web pages.	5	Create a web page for implementing ordered lists. (For example first year subject list, list of odd numbers from 1 to 50 etc.)	2	CO 2
LLO 6.1 Describe the procedure for using unordered lists.	6*	Create a web page for implementing unordered lists.	2	CO 2
LLO 7.1 Apply HTML lists on a given simple list.	7*	Write a HTML Code to display following Output: * <ul style="list-style-type: none"> • Maharashtra <ul style="list-style-type: none"> o Pune <ul style="list-style-type: none"> I. Dighi II. Moshi III. Shivajinagar o Mumbai <ul style="list-style-type: none"> I. Santakruiz II. Vikroli III. Mumbra 	2	CO 2

LLO 8.1 Explain process of using the given colors as a page background in a web page.	8*	Write a HTML code to create a web page with pink color background and display moving message in red color.	4	CO 3																						
LLO 9.1 Describe the feature of the given type of URL.	9*	Create a web page to link a different web age of same site.	4	CO 3																						
LLO 10.1 Understand the difference between relative and absolute URLs.	10	Create a web page to link A different location on same web page.	2	CO 3																						
LLO 11.1 Demonstrate the use of anchor tag to link external web pages.	11*	Create a web page to link an external page of different web site.	2	CO 3																						
LLO 12.1 Change the color of hyperlinks using HTML tags.	12	Create a webpage to use tags to change colors of links.	2	CO 3																						
LLO 13.1 Explain the procedure for inserting image in web page.	13*	Insert images on web page using various attributes.	2	CO 3																						
LLO 14.1 Describe the process of setting image as background for a web page.	14	Write a code for html webpage which displays the image of Government Polytechnic, Chh. Sambhajinagar.	4	CO 3																						
LLO 15.1 Implement HTML tags to set image as button.	15	Create a web page to implement image as a button and set image as background.	2	CO 3																						
LLO 16.1 Describe the given type of frames with suitable examples.	16*	Create a web page to implement frame tags.	4	CO 4																						
LLO 17.1 Describe the procedure to organize display as per given screen layout using frames.	17	Create a web page to implement frameset tag.	2	CO 4																						
LLO 18.1 Apply the given table attributes to organize data on a web page.	18*	Create a web page to implement table tags.	2	CO 4																						
LLO 19.1 Use the various table tags to arrange given data in a table.	19*	Create a webpage using table tags to display following table:	2	CO 4																						
		<table><tr><th rowspan="2">Sr. No</th><th rowspan="2">Dept. Name</th><th colspan="2">Courses</th></tr><tr><th>UG</th><th>PG</th></tr><tr><td>01</td><td>Information Technology</td><td>Yes</td><td>Yes</td></tr><tr><td>02</td><td>Computer Engineering</td><td>Yes</td><td>Yes</td></tr><tr><td>03</td><td>Artificial Intelligence & Machine Learning</td><td>Yes</td><td>No</td></tr><tr><td>04</td><td>Mechanical Engineering</td><td>No</td><td>Yes</td></tr></table>			Sr. No	Dept. Name	Courses		UG	PG	01	Information Technology	Yes	Yes	02	Computer Engineering	Yes	Yes	03	Artificial Intelligence & Machine Learning	Yes	No	04	Mechanical Engineering	No	Yes
		Sr. No					Dept. Name	Courses																		
					UG	PG																				
		01			Information Technology	Yes	Yes																			
		02			Computer Engineering	Yes	Yes																			
03	Artificial Intelligence & Machine Learning	Yes	No																							
04	Mechanical Engineering	No	Yes																							
LLO 20.1 Design a form for student registration.	20*	Create a web page for students Registration form using FORM tags.	4	CO 5																						
LLO 21.1 Demonstrate the use of GET, POST in HTML.	21	Write a program to demonstrate the use of GET, POST, developing a Feedback form with the use of <form> and <button> HTML tags.	2	CO 5																						

LLO 22.1 Explain the given properties of internal CSS.	22*	Create a web page for demonstration of CSS by applying Internal and External Style.	4	CO 5
LLO 23.1 Create a web page by applying inline CSS.	23	Create a web page for demonstration of CSS by applying Inline Style.	2	CO 5
LLO 24.1 Describe CSS code for given type of formatting using CSS on a web page.	24*	Write a CSS program to set an image as the background.	2	CO 5
Note: A suggestive list of LLOs is given the above table. A judicious mix of minimum 20 LLOs needs to be performed out of 24. The LLOs which marked as ‘*’ are compulsory, so that the students reach the ‘Precision Level’ of Dave’s ‘Psychomotor Domain Taxonomy’ as generally required by the industry.				

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

Micro project

The microproject has to be industry application based, internet-based, workshop-based, laboratory-based or field-based as suggested by Teacher

1. Analyze any 5 different website and prepare a detailed report.
2. Create a static website to display tourism locations of Maharashtra.
3. Design a static website to display all information about Government Polytechnic, Aurangabad.
4. Create a website to display all information about Indian Premier League (IPL).
5. Develop a website to display information about all incoming and outgoing Railways of Maharashtra.
6. Create a website for Hospital Information system.
7. Create a website for Bus reservation system.
8. Design a webpage for Simple Calculator.
9. Create a website for Bank Management System.
10. Create a website for School management system.
11. .

Any new topic (other than mentioned list) related to the curriculum can be given for micro project.

Assignment

1. Create a website to display personal information.
2. Write HTML code to display multiple frames in a single web page.
3. Develop a web page to display an academic timetable using table tags.
4. Write HTML code to display multiple images on a web page.
5. Design a registration form using HTML form elements.
6. Create a web page that uses ordered and unordered lists to organize content.
7. Design a product showcase page using images, headings, and descriptions.
8. Create a photo gallery layout using HTML and basic CSS.
9. Develop a resume web page using semantic HTML tags.
10. Create a navigation menu using HTML links and lists.

Activities for specific learning:

Following are some suggestive self-learning topics:

1. Know the HEAD and BODY tags of HTML.
2. Study Table tags and Frameset Tags and create multiple frames in single web page.
3. Students are expected to develop minimum one web page using form tag.

Note for Teacher: The marks distribution for self-learning activities should be decided by the teacher based on the nature and quality of Micro-projects, Assignments, and/or other self-learning tasks.

VIII. LABORATORY EQUIPMENT / INSTRUMENTS / TOOLS / SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLONumber
1	Computer System with latest configuration & with notepad software.	1.1 to 24.1
2	Notepad Software	1.1 to 24.1
3	Any Browser	1.1 to 24.1

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

Not Applicable

X. ASSESSMENT METHODOLOGIES/TOOLS**Formative assessment (Assessment for Learning)**

- Tests, Rubrics for COs Assignment, Self-Learning, Team Work, Presentation

Summative Assessment (Assessment of Learning)

- End Term Exam (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 LifeLong Learning	PSO-1	PSO-2
CO1	1	2	-	-	-	-	1	1	2
CO2	2	3	2	1	-	1	-	1	2
CO3	1	3	3	2	-	2	-	1	2
CO4	-	3	3	2	-	3	-	1	2
CO5	-	3	3	2	-	3	-	1	2

XII. SUGGESTED LEARNING MATERIALS / BOOKS

Sr.No	Author	Title	Publisher
1	Duckett Jon	Beginning Web Programming with HTML, XHTML & CSS	Wrox, 2008, ISBN - 978-8126525515
2	Thomas Powell	HTML and XHTML –The complete reference	Tata McGraw Hill, New, ISBN - 978-0070582811

3	Robbins	Learning Web Design	O'Reilly, ISBN - 978-9352137381
4	Dick Oliver	SAMS Teach Yourself HTML & CSS in 24 Hours	Pearson Education Publication , ISBN - 978-0672336140
5	Laura Lemay, Rafe Colburn, Jennifer Kyrnin	MASTERING HTML, CSS & Java Script Web Publishing	BPB Publications, ISBN - 978-8183335157

XIII. LEARNING WEBSITES & PORTALS

Sr.No	Link / Portal	Description
1	http://www.w3schools.com/html	Practical examples of given content
2	https://www.tutorialspoint.com/html/	Detailed description about course contents.
3	http://www.html.net/	Various example of lab experiments
4	http://www.2createawebsite.com	Learning material for HTML content
5	http://webdesign.about.com	Description about HTML and CSS
6	https://www.codecademy.com/learn/web	HTML and CSS coding example for given lab experiments