LJ University

University with a Difference

Diploma in Artificial Intelligence & Machine Learning

Course Code:025090106

Web Page Designing

Programme/ Branch Name			Diploma in Artificial Intelligence & Machine learning Engineering			
Course Type	HSSC	BSC	ESC	PCC	OEC	PEC

Legends: HSSC: Humanities and Social Sciences Courses BSC: Basic Science Courses
ESC: Engineering Science Courses PCC: Program Core Courses
OEC: Open Elective Courses PEC: Program Elective Courses

1. Teaching and Evaluation Scheme

Teaching Hours / Week				Evaluation Scheme			
L	**T**	**P**	**Total Credit**	**CCE**	**SEE (Th)**	**SEE (Pr)**	**Total**
0	0	4	2	50	-	50	100

Legends:
L: Lectures T: Tutorial P: Practical
CCE: Continuous & Comprehensive Evaluation
SEE (Th): Semester End Evaluation (Theory)
SEE (Pr): Semester End Evaluation (Practical)

2. Prerequisites

- ✓ Basic knowledge of computer system and web browser

3. Rationale

Since the task of website design is performed by using HTML coding, even in dynamic websites, the task of presentation of content is handled through HTML coding. This course introduces web page design using Hype-Text Markup Language and emphasizes 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. Javascript has become integral to the Internet experience as developers build increased interaction and complexity into their applications. This learning enables students to design static but interactive websites.

4. Objectives

- ✓ To study different tags to present and organize content on the web page.
- ✓ To gain knowledge about hyperlinking on a web page.
- ✓ To learn to apply different presentations to content using Cascading Style Sheets.
- ✓ To learn to apply client-side script using Javascript.

5. Contents

Unit No.	Unit Name	Topics	Learning Outcomes	% Weightage	Hours
1.	**Introduction to Hypertext Markup Language**	1.1. HyperText Markup Language Basic Structure 1.2. Block Level Tags 1.3. Text Formatting Tags	• Create HTML page using basic HTML tags • Design web page using block level tags and text formatting tags	15	8
2.	**HTML Basic Tags**	2.1. Types of Lists 2.2. Inserting Image 2.3. Hyperlink 2.4. Table Tags	• Display different types of lists, graphics, and interlinking of web pages • Display data in tabular format using HTML table tags	20	10
3.	**HTML Form Elements**	3.1. Media Tags 3.2. Form Elements	• Insert mediain a webpage • Create an HTML form to collect data from a user.	15	8
4.	**Introduction to Cascading Style Sheets**	4.1. Cascading Style Sheets 4.2. Types of Cascading Style Sheets 4.3. Use of CSS Selectors 4.4. Apply Styles to Different HTML Elements	• Learn different types of CSS • Apply stylesheets to design and decorate web pages.	20	10
5.	**Javascript**	5.1. Introduction of Javascript. 5.2. Explain datatypes, variables, operators and statements 5.3. Built-in and user defined functions of Javascripts. 5.4. Decision making and looping structures. 5.5. Event based programming 5.6. Manipulate HTML DOM	• Introduction and basic syntax of Javascript • Importance of decision-making and looping structures • To learn built-in and user defined functions • Working with Event based programming and HTML DOM.	30	20
				Total Hours	**56**

6. List of Practicals / Exercises

The practicals/exercises have been properly designed and implemented in an attempt to develop different types of skills, so that students can acquire the competencies/programme outcomes. Following is the list of practicals/exercises.

Sr. No.	Practicals / Exercises	Key Competency	Hours
1.	Create a web page using structure tags to display sample messages.	Create a HyperText Markup Language page	2
2.	Create a web page for displaying content using block level tags.	Use block level tags in HTML Page	4
3.	Create a web page using text formatting tags and special characters.	Use text formatting tags in HTML Page	2
4.	Create a web page for implementing different types of Lists.	Use List tags in HTML Page	2
5.	Create a web page to link- a) A different web page of same site b) A different location on the same web page. c) A specific location on different web page of same site.	Create hyperlink	2
6.	Create a web page to link: a)An external page of different web site. b)To an email ID	Create advanced hyperlink	2
7.	Insert images on a web page using various attributes.	Add different images	2
8.	Implement image as a button and set image as background.	Set image as button and background	2
9.	Create a web page to implement Media tags and iframe.	About media tags and iframe	2
10.	Create a web page to implement Table tags	Create table	2
11.	Create a web page to implement Form tags	Create a form to collect data	4
12.	Create a web page for a demonstration of CSS by applying different types of Stylesheet	Apply different types of stylesheet	4
13.	Create a web page to implement Site navigation(Vertical, Horizontal, etc)	Implement site wide navigation menu	4
14.	Create a web page to implement Dropdown menu	Implement Dropdown menu	2
15.	Write a Javascript program to check whether given number is odd or even using if else ladder.	Apply decision making statement	2
16.	Write a Javascript program using user defined functions to check whether given number is prime or not.	Apply looping structure and decision making statement	2
17.	Write a Javascript program to calculate the factorial of a given number entered into a textbox.	Get data from DOM using Javascript	2
18.	Write a Javascript program to take input of student name, enrollment number, class, address and display in a dialog box on click of a button.	Get data from DOM using Javascript	4

19.	Write a Javascript program to change background color of table as selected by user from a list of colors given in combo box.	Manipulate DOM using Javascript	2
20.	Write a Javascript program to develop simple calculator for addition, subtraction, multiplication and division operations	Create a calculator using Javascript	4
21.	Write a Javascript program to perfrom form validation for all the types of form elements.	Perform form validation on an HTML form.	4
		Total Hours	**56**

7. Textbooks

1) HTML& CSS: The Complete Reference by Thomas A. Powell, Latest Edition, McGrawHill Education.
2) Javascript the Complete Reference by Thomas A. Powell, Latest Edition, McGrawHill Education.

8. Reference Books

1) HTML and CSS Design and Build Websites by Jon Duckett, Latest Edition, Wiley.
2) Eloquent Javascript by MarijnHaverbeke, Latest Edition, No Starch Press.

9. Open Sources (Website, Video, Movie)

1) https://nptel.ac.in/courses/106/105/106105084/
2) https://www.w3schools.com/css/default.asp
3) https://www.w3schools.com/js/default.asp
4) https://www.tutorialspoint.com/html/index.htm
5) https://www.tutorialspoint.com/Javascript/index.htm
6) https://www.learn-html.org/
7) http://www.digimat.in/nptel/courses/video/106106156/L09.html