Department: Computer Science and Engineering	
Course Title: Web Technologies(Integrated Lab)	Course Code: CS554
Credits(L:T:P) : 0:0:1	Core/Elective : Elective
Type of Course: Integrated Lab	Total Contact Hours: 26
CIE Marks: 50	SEE Marks:

Course Outcomes:

CO1:	Design and implement dynamic web documents with good aesthetic sense.
CO2:	Apply Web design best practices and styles while developing Websites.
CO3:	Design more interactive webpages with the help of scripting language and document
	object model.
CO4:	Develop dynamic Web-based applications to interact with server.
CO5:	Implement a well-formed client and server side web application.

Unit No.	List of programs	No. of Hours
1	1. Design web pages for your institute containing a description of the courses,	08
	departments, faculties, library etc, use href, list tags and add college image as a	
	background picture for home page Also create and display class timetable	
	using table tag. Use additional features like spanning rows, columns and table borders.	
	2. Create a form to collect Student feedback. (use textbox, text area, checkbox, radio button, select box etc.).	
	3. Create a web page using frame. Divide the page into two parts with	
	Navigation links on left hand side of page (width=20%) and content page on	
	right hand side of page (width = 80%). On clicking the navigation Links	
	corresponding content must be shown on the right hand side.	
	4. Write html code to develop a webpage having two frames that divide the	
	webpage into two equal rows and then divide the row into equal columns fill	
	each frame with a different background color.	
	5. Create your resume using HTML tags also experiment with colors, text (Bold, italic and different headings), image, link, size and also other tags.	
2	1. Design a web page using CSS with suitable design for the following:	04
	a. Demonstrate different font styles	
	b. Control the repetition of image with background-repeat property	
	c. Define style for links as a:link, a:active, a:hover, a:visited	
	d. Demonstrate Element visibility property.	
	2. Design a web page of your institute(Unit 1.1) with an attractive background	
	color, text color, an Image, font etc. (use internal CSS). Use External CSS to	
	format the class timetable.	

	3. Use External, Internal, and Inline CSS to format resume that you	
	created in Unit 1.5	
3	1. Develop a JavaScript to display today's date.	08
	2. Develop simple calculator for addition, subtraction, multiplication and division operation using JavaScript.	
	3. Create HTML Page that contains form with fields Name, Email, Mobile No, Gender, Favorite Color and a button. Write a JavaScript code to validate all the fields when the button is clicked, later combine and display the information in textbox.	
	4. Write an XHTML document which displays a form containing text elements to input register number, sub-code, marks in three tests and a button element. Also write java script code to compute average of two better tests on click of button and print average marks using alert. Validate all the fields using javascript.	
	5. Write an XHTML and java script to validate the following fields in a registration page a. User ID (must be of length 5 to 12) b. Name (only alphabets and the length should not be less than 15 characters) c. Password (must be eight characters including one uppercase letter, one special character and alphanumeric characters) d. E-mail(should not contain invalid addresses)	
4	1. Write a PHP program to display today's date in dd-mm-yyyy format.	02
	2. Write a PHP program to check whether the number is prime or not when user input a valid number from client side.	
	3. Write a PHP program to print first 10 Fibonacci Numbers.	
5	1. Create HTML page that contain textbox, submit / reset button. Write PHP program to display this information and also store into text file.	04
	2. Write a PHP Script for login authentication. Design an html form which takes username and password from user and validate against stored username and password in file.	

Text Book:

1. Randy Connolly, Ricardo Hoar, "Fundamentals of Web Development", 2nd Edition, Pearson Education India. 2017.

Reference Books:

- 1. Jeffrey C. Jackson: Web Technologies- A Computer Science Perspective, Pearson Education, Eleventh Impression, 2012.
- 2. Luke Welling, Laura Thomson, "PHP and MySQL Web Development", 5th Edition, Pearson Education, 2016. (ISBN:978-9332582736)
- 3. Nicholas C Zakas, "Professional JavaScript for Web Developers", 3rd Edition, Wrox/Wiley India, 2012. (ISBN:978-8126535088)

Web Resources:

1. NPTEL: http://nptel.ac.in/courses/106105084/