WEB DESIGNING		
Course Code: 10ABTEC22215		
Course Frame Work		
Credits: L-T-P: 2 -0 -1		**Total Credits: 3**
Contact Hours/Week: 4	**Direct Teaching Hours: 30**	**Total Contact Hours: 60**

Course Learning Objectives: This course will enable the students to

- Design and develop websites using fundamental web languages, technologies, and tools.
- Distinguish between server-side and client-side web technologies.

Course Outcomes: On completion of the course, student would be able to:

Course Outcomes	Description	RBT
CO1	Show various elements of html and css in a web page.(why, what, how, how to assess)	L1
CO2	Write Java script code to add functionality to the website	L2
CO3	Apply the knowledge of servers while installing and running various web services.	L3
CO4	Simulate a website using database connectivity in sql.	L3
CO5	Define various components and functionalities of Go Lang for web development.	L1

Syllabus		**Hours**
MODULE 1	**HTML & CSS**	**9**
HTML- List, Tables, Images, Forms, Frames, Cascading Style sheets. XML- DTD,Shemas, Document Object model		
MODULE 2	**JAVA SCRIPT**	**9**
Java Script -Control statements, Functions, Arrays, Objects, Events, Dynamic HTML with Java Script, Ajax		
MODULE 3	**WEB SERVERS**	**9**
Web servers – IIS (XAMPP, LAMPP) and Tomcat Servers. Java Web Technologies- Servlets, Java Server Pages, PHP (back end scripting) Web Technologies in VS Code, Building a Web Application in VS Code, JSF Components, Session Tracking, Cookies.		
MODULE 4	**DATABASE CONNECTIVITY**	**9**
Introduction to Sql : Installation ,Databases , syntax, data types, operators, expressions, comments. SQL Commands – DDL,DML and DCL.		

Database Connectivity with MySQL - Servlets, Build responsive websites with Bootstrap.

MODULE 5	Go Lang (Self Learn)	9

Basics of Go and web applications, Handling and Processing requests: using forms, cookies and JSON post requests.
Displaying content using various Templates and template engines
Storing data :

Scheme of Evaluation:

A. Continuous Internal Assessment(CIA) Scheme: Theory (L-2 Credits)

Components	Technical Aptitude Quiz	App Development	LAB Assignments	IAT	Preparatory	Theory Total
Max. Marks	10	10	10	10	10	50

Scheme of Evaluation:

B.Continuous Internal Assessment(CIA) Scheme: LAB (P-1 Credits)

Components	Submission	Execution	Record	Lab Total
Max. Marks	In time 3M Up to 2 days late 1M Beyond 2 days late 0M	4	3	10

Note: A student has to obtain a minimum of 40% in theory as well as lab to appear for ESE.

A. End Semester Exam (ESE) Scheme: 50 marks

Question paper pattern:

a) Question paper shall have 5 main questions corresponding to 5 modules.
b) Each main question will have two full questions carrying 10 marks each.
c) A full question may have a maximum of four sub questions, covering the topics under a module.

The students will have to answer all 5 main questions, selecting one full question from each module.

TEXT BOOKS

1. “Learning Web Design: A Beginner’s Guide to HTML, CSS, Javascript, and Web Graphics”, Jennifer Niederst Robbins, O’Reilly Media, 2001
2. Robin Nixon, “Learning PHP, MySQL &JavaScript with jQuery, CSS and HTML5”, 4th Edition, O"Reilly Publications, 2015. (ISBN:978-9352130153)
3. Alan A. A. Donovan, Brian W. Kernighan: The Go Programming Language
4. Balbaert Ivo , “The Way to Go: A Thorough Introduction to the Go Programming Language”

REFERENCE

Robert W. Sebesta, “Programming with World Wide Web”, Pearson, 4th edition, 2008

David William Barron, “The World of Scripting Languages”, Wiley Publications, 2000

Recommended general learning resources:

- https://www.w3schools.com
- https://developer.mozilla.org
- http://html.net
- Go Resources (golang-book.com)
- Learn Go with Tests - Learn Go with tests (gitbook.io)

E-MATERIAL

- Create a Simple Website with HTML, CSS, JavaScript (freecodecamp.org)
- HTML Examples (w3schools.com)
- Free CSS Tutorial - HTML5 and CSS3 Fundamentals | Udemy

BEYOND SYLLABUS

- Deploy a website in Server using AWS, Go daddy or any other hosting service
- Create a website using any web building tools like wix , word press etc.
- Converting any website to Mobile app using online tools.

LIST OF LAB PROGRAMS:

1	HTML Basic Structure: Create a profile page using basic HTML tags like heading, paragraph, list, table, image and links.	
2	HTML Advanced: Create a contact form using HTML form tags- text, label, radio, checkbox, select and text area etc.	
3	CSS Styling: Apply CSS styles to format text, change colors, and add borders to HTML elements.	
4	CSS Transitions and Animations: Add transitions and animations to HTML elements using CSS properties	
5	Creation and Parsing of XML Data: Create an XML data .Read and parse an XML document using JavaScript to extract and display its data.	
6	JavaScript Form Validation: Validate form input using JavaScript to ensure correct data is submitted.	
7	JavaScript : Simple calculator	
8	Install Apache web server. While installation assign port number 8080. Access the pages by using the urls : http://localhost:8080/html/books.html	
9	Building a Web Application- Digital Library in VS Code and running with live server.	
10	Write a sample program using Java servlet code for user authentication using session tracking, cookies, and a login form.	
11	SQL Database Creation: Create a simple SQL database using appropriate statements to store and retrieve data.	
12	Build responsive websites with Bootstrap.	
13	Create a small web application that can store and fetch data from sql using Php (server side scripting)	
14	Write a small program in Go to creates a basic web server that listens on port 8080	
15	Write a To-do List Web Application that creates a simple to-do list.	