

Branch Name:	Information Technology
Semester/Year:	Semester V/ Third Year
SubjectTitle:	Web Development Theory
Subject Code:	2ET1050502T
Pre-requisite:	Fundamentals of Programming and Networking

Course Objective:

- To understand working of internet and websites.
- To study programming for web application development.
- To analyze and design web user interface with browser compatibility.
- To understand working of data connectivity on server side programming.

Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)								
					Theory (Marks)				Practical (Marks)				Total (Marks)
	L	T	P	Total	SEE		CCA		SEE		CCA		
					Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
3	3	-	-	3	24	60	16	40	-	-	-	-	100

Subject Contents			
Sr. No	Topic	Total Hours	Weightage (%)
1	Introduction: Concept of WWW, Internet and WWW, HTTP Protocol: Request and Response, Web browser and Web servers, Features of Web2.0	04	10
2	Web Design: Concepts of effective web design, Web design issues including Browser, Bandwidth and Cache, Display resolution, Look and Feel of the Website, Page Layout and linking, User centric design, Sitemap, Planning and publishing website, Designing effective navigation	05	10
3	HTML: Basics of HTML, formatting and fonts, commenting code, color, hyperlink, lists, tables, images, forms, XHTML, Meta tags, Character entities,framesandframesets,iframe,BrowserarchitectureandWebsite structure. Overview and features of HTML5	03	10
4	Style sheets: Need for CSS, introduction to CSS, basic syntax and structure, using CSS, background images, colors and properties, manipulatingtexts,usingfonts,bordersandboxes,margins,paddinglists, positioningusingCSS,CSS2,OverviewandfeaturesofCSS3	05	12
5	JavaScript: Client side scripting with JavaScript, variables, functions, conditions, loops and repetition, Pop up boxes, Advance JavaScript: Javascript and objects, JavaScript own objects, the DOM and web browser environments, Manipulation using DOM, forms and validations, DHTML:	06	12

	Combining HTML, CSS and Javascript, Events and buttons		
6	XML: Introduction to XML, uses of XML, simple XML, XML key components, DTD and Schemas, Using XML with application. Transforming XML using XSL and XSLT	05	12
7	PHP: Introduction and basic syntax of PHP, decision and looping with examples, PHP and HTML, Arrays, Functions, Browser control and detection, string, Form processing, Files, Advance Features: Cookies and Sessions, Object Oriented Programming with PHP	04	10
8	PHP and MySQL: Basic commands with PHP examples, Connection to server, creating database, selecting a database, listing database, listing table names, creating table, inserting data, altering tables, queries, deleting database, deleting data and tables, PHP my admin and database bugs	02	09
9	Bootstrap: Introduction to Bootstrap, Bootstrap Grid System concept JQuery: Introduction of JQuery, Functionalities of JQuery, Functions of JQuery, text, style attributes with JQuery, Using JQuery make website interactive	5	15

Course Outcome:

After learning the course, the students will be able to understand the working of website and internet. Using programming skill of HTML, Java Script, XML, PHP and MySQL, Bootstrap and JQuery Students will be able to develop a user interactive websites. The students will be able to design of a web pages according to client requirement and manage the content as improve the readability.

List of Reference Books:

- 1 HTML5, BlackBook, dream tech Press
- 2 Internet and World Wide Web How to program, P.J. Deitel & H.M. Deitel, Pearson
- 3 Web Technologies, BlackBook, dream tech Press
- 4 Web Design, Joel Sklar, Cengage Learning
- 5 Developing Web Applications in PHP and AJAX, Harwani, McGraw Hill
- 6 The Web Designer's 101 Most Important Decisions Professional Secrets for a Winning Website, Scott Parker, Paperback
- 7 Beginning Web Programming with Html, XHTML and CSS, Jon Duckett

List of Open-Source Software/learning website:

- <http://www.nptelvideos.in/2012/11/data-structures-and-algorithms.html>
- https://www.tutorialspoint.com/data_structures_algorithms/
- Data Structure Fundamentals: <http://www.cprograms.in/index.htm>
- Data structure video <http://www.youtube.com/watch?v=tORLeHHtazM>
- <https://nptel.ac.in/courses/106102064/>
- <https://nptel.ac.in/courses/106103069/>

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	After learning the course, the students will be able to understand the working of website	2 Understanding
CLO2	After learning the course, the students will be able to understand the working of internet	1 Remembering
CLO3	Using programming skill of HTML, Java Script, XML, PHP and MySql, Students will be able to develop a websites.	2 Understanding,
CLO4	Using programming skill of HTML, Java Script, XML, PHP and MySql, Students will be able to develop a user interactive websites.	3 Applying, 2 Understanding
CLO5	The students will able to design of a web pages according to client requirement using Bootstrap.	5,3, 4 Evaluate , Applying, Analyze
CLO6	The students will able to design of a web pages according to client requirement and manage the content as improve the readability using JQuery.	6 Creating

Mapping of CLOs with POs & PSOs

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes(PSOs)			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CLO1		L	L				L					M	H	M	M	M
CLO2		M				L		M		H			H	M	M	M
CLO3					M	H		M					H	M	M	M
CLO4		M	M	M		M		M	M					M		M
CLO5				M	H	M	H	M	H						H	
CLO6										L		M		H		

H: High, M: Medium, L: Low