

Uka Tarsadia University



**B.Tech.
Semester II**

**WEB DESIGNING
IT3007**

**EFFECTIVE FROM July-2021
Syllabus version: 1.00**

Subject Code	Subject Title	Teaching Scheme			
		Hours		Credits	
		Theory	Practical	Theory	Practical
IT3007	Web Designing	3	4	3	2

Subject Code	Subject Title	Theory Examination Marks		Practical Examination Marks	Total Marks
		Internal	External	CIE	
IT3007	Web Designing	40	60	100	200

Objectives of the course:

- The course introduces fundamentals of various internet technologies and web framework.
- The primary objective of the course is to provide concepts involved in designing of website by providing knowledge of various tools in order to design of website.

Course Outcomes:

Upon completion of the course, the student will be able to:

C01: Get knowledge about the World Wide Web (WWW) and basics of web design.

C02: Learn and apply the markup language for web design.

C03: Understand and apply the Cascading Style Sheet (CSS).

C04: Understand and apply the JavaScript (JS).

C05: Apply web graphics elements.

C06: Design web page using CSS frameworks.

Sr. No.	Topics	Hours
Unit – I		
1	Basics of Web Designing: Introduction to web designing, The Internet Versus the Web, A Web Browser, Web Page Addresses (URLs), Protocols, Website design issues, Planning a website, Introduction to HTML, HTML document structure.	7
Unit – II		
2	Markup Language: HTML, Marking up text, Adding links, Adding images, Table markup, Forms, Embedded media.	8

Unit – III		
3	CSS: Introduction to CSS, Formatting text, Colors and Backgrounds, Box, Floating and Positioning, CSS layout with FlexBox and Grid, Introduction to responsive web design, More CSS techniques.	8
Unit – IV		
4	JavaScript: Introduction to JavaScript, Adding JavaScript to a page, The anatomy of a script, The browser object, Events, DOM, Polyfills, JavaScript libraries.	8
Unit – V		
5	Web Graphics:	6
	Web Image Basics: Image sources, Image formats, Image size and resolution, Image asset strategy, Favicons.	
	Image Asset Production: Saving images in web formats, Working with transparency, Image optimization.	
	SVG: Drawing with XML, Features of SVG as XML, SVG tools, Responsive SVGs.	
Unit – VI		
6	CSS Frameworks: Introduction to CSS frameworks, Introduction to bootstrap, Bootstrap file structure, Basic HTML template, Default grid system, Fluid grid system, Container layouts, Responsive design, Typography, Tables, Forms, Buttons, Images, Icons, Bootstrap layout components.	8

Sr. No.	Web Designing (Practical)	Hours
1	a) Introduction to HTML. b) Write a HTML program to create Hello World Program. [Use <html>, <body>, <title>, comment <!-- --> tags.]	2
2	Write a HTML code to demonstrate use of following text formatting tags: <i>, , <u>, <sup>, <sub>, <h1> to <h6>, <p>, <hr>, , <div>, .	2
3	Write a HTML code to create ordered list, unordered list and definition list.	2
4	Write a HTML code demonstrates use of images, hyperlinks and background attribute.	2

5	Write a HTML code to create time table of your class using Table tags.	2
6	Write a HTML code to create form using following tags: <form>, <input>(text, password, checkbox, radio, submit, button, reset).	4
7	Write a HTML code to create form using following tags: <textarea>, <select>, <option>, <fieldset>, <legend>, <button>.	2
8	Write internal and inline CSS code to design your product page using following selector: body, h1, p, hr, img. Apply following properties: color, font, text, background, border.	4
9	Write a CSS code to design your product page using class, id and pseudo class selectors. Apply following properties: color, font, text, background, border, margin, padding, list-style and position using concept of class(.) and id(#), pseudo class selector, internal and external CSS.	4
10	Create a responsive HTML web pages using Bootstrap4 Framework.	4
11	Write a CSS code for applying animation, shadows, text effects and gradients to design a web page.	2
12	Write a JavaScript to show alert, confirm and prompt boxes.	2
13	Write a JavaScript function to find maximum of three numbers taken from user using if-else and print it.	2
14	Print date and time on click of a button using inner HTML in JavaScript.	2
15	Write a HTML/JavaScript code to create a simple calculator.	2
16	Write JavaScript to validate book issue form.	4
17	Write a code to implement dynamic web page for adding and deleting elements.	2
18	Write a JavaScript program which initialize jQuery and access various properties of html tags using jQuery methods.	2
19	Write a code to read and update value of text box using jQuery.	2
20	a) Write a jQuery function to find maximum of three numbers taken from user. b) Print date and time on click of a button using html method of jQuery.	4
21	Write JavaScript code to validate book issue form using jQuery validate.	2
22	Create a website using HTML, CSS and JavaScript.	6

Text book:

1. Niederst Jennifer Robbins, "Learning Web Design: A Bignner's Guide to HTML, CSS, JavaScript and Web Graphics", 5th Edition, O'Reilly.

Reference books:

1. Ralph Moseley, M.T.Savaliyaa, "Developing Web Application", Wiley India.
2. Jake Spurlock, "Bootstrap", O'Reilly.
3. "Web Technologies", Black Book, Dreamtech Press.

Course objectives and Course outcomes mapping:

- The course introduces fundamentals of various internet technologies and web framework: CO1, CO6
- The primary objective of the course is to provide concepts involved in designing of website by providing knowledge of various tools in order to design of website: CO2, CO3, CO4, CO5

Course units and Course outcome mapping:

Unit No.	Unit Name	Course Outcomes					
		CO1	CO2	CO3	CO4	CO5	CO6
1	Basics of Web Designing	✓					
2	Markup Language		✓				
3	CSS			✓			
4	JavaScript				✓		
5	Web Graphics					✓	
6	CSS Framework						✓

Programme Outcomes:

- PO 1: Engineering knowledge: An ability to apply knowledge of mathematics, science, and engineering.
- PO 2: Problem analysis: An ability to identify, formulates, and solves engineering problems.
- PO 3: Design/development of solutions: An ability to design a system, component, or process to meet desired needs within realistic constraints.
- PO 4: Conduct investigations of complex problems: An ability to use the techniques, skills, and modern engineering tools necessary for solving engineering problems.
- PO 5: Modern tool usage: The broad education and understanding of new engineering techniques necessary to solve engineering problems.
- PO 6: The engineer and society: Achieve professional success with an understanding and appreciation of ethical behavior, social responsibility, and diversity, both as individuals and in team environments.
- PO 7: Environment and sustainability: Articulate a comprehensive world view that integrates diverse approaches to sustainability.
- PO 8: Ethics: Identify and demonstrate knowledge of ethical values in non-classroom activities, such as service learning, internships, and field work.
- PO 9: Individual and team work: An ability to function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO 10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give/receive clear instructions.
- PO 11: Project management and finance: An ability to demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO 12: Life-long learning: A recognition of the need for, and an ability to engage in life-long learning.

Programme Outcomes and Course Outcomes mapping:

Programme Outcomes	Course Outcomes					
	C01	C02	C03	C04	C05	C06
P01	✓	✓	✓	✓		
P02	✓	✓	✓	✓	✓	✓
P03		✓	✓	✓	✓	✓
P04				✓	✓	✓
P05					✓	✓
P06						
P07						
P08						
P09						
P010						
P011						
P012						