

NIRMA UNIVERSITY
SCHOOL OF TECHNOLOGY, INSTITUTE OF TECHNOLOGY
Proposed Teaching & Examination Scheme
Master of Computer Application (2- years programme)
Semester-I

L	T	P	C
0	0	4	2

Course Code	3MCA106
Course Title	Web Technology

Course Outcomes (COs):

At the end of the course, students will be able to -

1. apply the knowledge of HTML to structure web pages and applications.
2. use CSS to styling and visually format web pages and applications.
3. apply the knowledge of JavaScript Programming for interactive front-end web development.
4. develop mobile and browser responsive web application.

Syllabus:

Practical sessions will be conducted based on following topics:

HTML5: Introduction, editors, basic, elements, attributes, headings, paragraphs, formatting, links, head, images, tables, lists, blocks, layout, colors, entities, URL encode, quick list, new elements, canvas, SVG, drag/drop, geolocation, video, audio, iframes, form, semantic, web storage, web workers, SSE(server sent event).

CSS3: Introduction, inline styles, embedded styles, conflicting styles, linking external style sheets, box model and text flow, grouping/nesting, pseudo-class, pseudo-element, navigation bar, image manipulation, media types, attribute selectors, borders, gradients, text effects, transformation, transitions, animations, multiple columns.

JavaScript: Introduction, pseudo code, displaying a line of text in web page, user inputs with prompt dialogs, comments, variable, data types, operators, control statements, functions, arrays, JavaScript objects, JavaScript events, registering event handlers, form processing with different events, the event object and this.

JQuery: Introduction of jquery, install, syntax, selectors, events, jquery effects, jquery html, jquery traversing.

Bootstrap Framework: Introduction of bootstrap framework, bootstrap grids, bootstrap theme, bootstrap CSS ref, bootstrap JS ref.

Suggested Readings[^]:

1. Deitel and Deitel, Internet and World Wide Web: How to Program Pearson Education.
2. Minoli, Internet and Intranet Engineering.
3. Charlton Ting and R Allen Wyke, Pure JavaScript by Jason D. Gilliam, Techmedia.
4. Guy Hart-Davis, HTML, XHTML & CSS QuickSteps, Tata McGraw Hill Edition.
5. Matthew MacDonald, Creating a Website: The Missing Manual, 3rd Edition, O'Reilly.
6. Glenn Johnson, Programming in HTML5 with JavaScript and CSS3, Microsoft Press.
7. Ben Frain, Responsive Web Design with HTML5 and CSS3, Packt Publishing Ltd.
8. Chris Aquino and Todd Gandee, Front-End Web Development: The Big Nerd Ranch Guide (Big Nerd Ranch Guides), Pearson Technology Group.
9. Spurlock Jake, Bootstrap: Responsive Web development. O'Reilly Media, Inc.
10. <http://www.w3schools.com/>
11. <http://howtocodeinhtml.com/>

L=Lecture, T=Tutorial, P=Practical, C=Credit

[^]this is not an exhaustive list
