

BCA/Integrated MCA 2nd Semester

Teaching Schedule

030010210/060060208: CC6 Introduction to Web Design

Objective: To provide basic knowledge of web and HTML for designing web pages in conjunction with HTML tags, text, videos and CSS and event handling using JavaScript.

Course Outcomes: Upon completion of the course, students shall be able to

C01: Determine usage and working of Web.

C02: Express and understanding of basic HTML and CSS structures.

C03: Design web pages using CSS.

C04: Designing application forms and frames in web pages using CSS.

C05: Design attractive web pages with graphics and layouts using CSS.

C06: Employ JavaScript within HTML.

Unit	Sub Unit	No. of Lecture(s)	Topics	Reference Chapter/Additional Reading	Teaching Methodology	Evaluation Parameter
Unit-1: The Web						
1	1.1	1	Introduction	MMD#1 Page No. 1-2	Discussion PPT	Quiz, Theory Unit Test-1 Assignment
	1.2		Web Browser, Web Server	MMD#1 Page No. 8-12		
	1.3		Internet	BR#1 Page No. 1-11		
	1.4	2	Planning Website: Types of Sites, Lifespan of Site, Practice Good Design	MMD#1 Page No. 13-17	Discussion, PPT	
	1.5	1	Web Hosting: the URL	MMD#3 Page No. 49-53	Discussion, PPT	
	1.6	1	Domain Names and IP Address	MMD#3 Page No. 54-61	Discussion, PPT	
	1.7	1	Transferring Files: FTP, Browser-Based Uploading	MMD#3 Page No. 72-76	Chalk & talk, PPT	
Unit-2: HTML and Cascading Style Sheets						
2	2.1	1	Introduction: HTML	MMD#2 Page No. 19-20	Chalk & talk	Quiz, Practical & Theory Unit Test-1 Assignment
	2.2	2	HTML Document: Basic Skeleton, Adding Contents, Structuring Text, HTML Elements and Nesting Elements	MMD#2 Page No.27-29,32-36	PPT, Demonstration	
	2.3	1	HTML Elements: Paragraph, Line Breaks, Heading, Horizontal Lines, Preformatted Text	MMD#5 Page No. 107-114	PPT, Demonstration, Two minutes game	
	2.4		Introduction to CSS	PB#14 Page No. 274	PPT,	

		1		http://www.w3schools.com/css/css_intro.asp	Demonstration	
	2.5		Syntax and Structure of CSS	http://www.w3schools.com/css/css_syntax.asp		
	2.6	2	Class and ID Selectors, Pseudo Selector, Measurement Units	JST#6 Page No. 157 - 159 JST#6 Page No. 160 - 164 JST#7 Page No. 170 - 173	PPT, Demonstration, Two minutes game	
	2.7	2	External Style Sheets, Embedded Style Sheets and Inline Style Sheets	PB#14 Page No. 299-312	Chalk & talk, PPT, Demonstration	
Unit-3: HTML Formatting, Listing, Linking and Table Elements						
3	3.1	2	HTML Formatting Elements: Look and Character Elements	PB #7 Page No. 138 - 153	PPT, Demonstration	Theory & Practical Unit Test-1, Open Book, Assignment
	3.2	1	Type of Listing and Listing Elements, Nested Listing	MMD#5 Page No. 119-123	PPT, Demonstration	
	3.3	3	Web Typography: CSS Font properties, CSS Text spacing properties, Customizing Bulleted and Numbered Lists	JST#7 Page No.174 - 187 PB#14 Page No.283 - 286 http://www.w3schools.com/css/css_list.asp	PPT, Demonstration	
	3.4	1	HTML Linking Elements: Internal and External Links, Relative Links, Mailto Link	MMD#8 Page No. 213-225	PPT, Demonstration	
	3.5	1	Website navigation using CSS	http://www.w3schools.com/css/css_navbar.asp	Demonstration	
	3.6	1	HTML Table Elements	PB#11 Page No.220 - 230	Chalk & talk, Demonstration, Code rearrange	
	3.7	1	Applying properties in HTML Table: Margin, Padding and Border	PB#11 Page No.226	Chalk & talk, Demonstration	
Unit-4: HTML Forms & Frames						
4	4.1	1	Forms working	JST#12 Page No. 316 - 317 PB#12 Page No. 238	PPT, Discussion	Open Book, Theory & Practical
	4.2	1	Form Element, Input Objects: text, password, checkbox, radio, submit, reset	PB#12 Page No. 238-243 JST#12 Page No. 318 - 322	Demonstration	Unit Test-2, Assignment

4.3	1	Input Objects grouping and <SELECT>, <OPTION> AND <TEXTAREA> Elements	PB#12 Page No. 244- 249 JST#12 Page No. 325 - 329	Demonstration	
4.4	2	Styling Forms with CSS, Styling Forms within Tables	http://www.htmlgoodies.com/tutorials/forms/article.php/3888746/HTML-Forms-From-Basics-to-Style-Layouts.htm	PPT, Demonstration	
4.5	1	Frames			
4.6	2	Frame Elements: <FRAMESET>, <FRAME>, <NOFRAMES> and <IFRAME>	JST#11 Page No. 292- 299	Chalk & talk, Demonstration	
4.7	2	Customizing Frame Characteristics	JST#11 Page No. 299- 308		

Unit-5: Adding Graphics and Page Layout

5	5.1	2	Images: The Element, Alternate text, Picture Size, File Format for Graphics, Putting Pictures on Colored Background	MMD#7 Page No. 183- 193	PPT, Demonstration	Theory & Practical Unit Test- 2, Assignmen t
	5.2	3	Images and Styles: Inline Images in Text, Borders, Wrapping Text Around an Images, Adding Captions, Background Images	MMD#7 Page No. 194- 204	PPT, Demonstration	
	5.3	1	Image Links and Image Map	MMD#8 Page No. 226- 229	PPT, Demonstration	
	5.4	2	Style based Layout: Structuring pages with <div> element, Floating Boxes, Fixed Boxes	MMD#9 Page No. 243- 246	PPT, Demonstration	

Unit-6: Java Script

6	6.1	2	Java Script: Introduction, Server-side and Client-side programming, Scripting Language	MMD#15 Page No. 423- 426	PPT, demonstration	Assignmen t
	6.2	1	<SCRIPT> Element	MMD#15 Page No. 426- 431	Demonstration	
	6.3		Variables and Data Types	MMD#15 Page No. 431- 434	Demonstration	
	6.4	1	Functions	MMD#15 Page No. 434- 440	Demonstration	
	6.5	1	Dialog Boxes: Alert, Confirm and Prompt boxes	BR#8 Page No. 143-147	Demonstration	

Text Book:

1. Matthew MacDonald - Creating a Website : The missing manual SPD – O'Reilly [MMD]

References :

1. Joel Sklar, Web Design Principles, CENGAGE Learning [JSW]
2. Joel Sklar, Textbook of Web Design, CENGAGE Learning [JST]
3. Bayross - Web Enabled Commercial Application Development - BPB Publication [BR]
4. Patel and Barik - Introduction to Internet & Web Designing - Acme Learning [PB]
5. Elizabeth Robson & Eric Freeman-Head First HTML and CSS-O'Reilly[EEHC]
6. Rob Larson-Beginning HTML and CSS-Wiley Publishing Inc[RB]

Note: # denotes chapter number.

Course Objectives and Course Outcomes Mapping:

Understanding of Web: C01

Understanding of HTML: C02

Designing web pages: C03, C04, C05

HTML tags, text, videos and CSS: C02, C03, C04, C05

Event handling using JavaScript: C06

Course Units and Course Outcomes Mapping:

Unit No.	Units	Course Outcomes					
		C01	C02	C03	C04	C05	C06
1	The Web	✓					
2	HTML and Cascading Style Sheets		✓		✓		✓
3	HTML Formatting, Listing, Linking and Table Elements		✓	✓			
4	HTML Forms & Frames		✓	✓	✓		
5	Adding Graphics and Page Layout		✓		✓	✓	
6	Java Script						✓

Course Outcomes and Programme Outcomes Mapping:

Programme Outcomes:

P01: Proficiency in and ability to identify problems related to computer science as well as design and apply computational knowledge to solve them.

P02: Ability to design, develop, test and maintain system, component, product or process as per needs and specification.

P03: Understanding of professional and ethical role and responsibility.

P04: Recognition of the need for and ability towards life-long learning.

P05: Knowledge of programming languages, database systems, operating systems, software

engineering, Web & Mobile technology and relevant modern issues.

PO6: Ability to demonstrate the use of modern tools, models and languages to solve problems related to software development.

Course Outcomes	Programme Outcomes					
	PO1	PO2	PO3	PO4	PO5	PO6
C01	✓	✓			✓	✓
C02	✓	✓		✓	✓	✓
C03	✓	✓		✓	✓	✓
C04	✓	✓		✓	✓	✓
C05	✓				✓	✓
C06	✓	✓		✓	✓	✓

Computing Environment

A student must have the following computing environment in laboratory and or on his/her laptop.

- ❖ Latest version of any Web Browser
- ❖ Notepad/gedit editor

Modes of Transaction (Delivery):

Unit No	Topic Detail	Teaching Approach	PO mapped
2	HTML Elements and CSS	Two-minute game (Students have to pick one chit on the spot and have to give some explanation on the element or property which is written on the chit within one minute.)	PO2, PO5, PO6
3	HTML Table Elements	Code arrangement (Students have to arrange scattered	PO1, PO2, PO5

		designing code of webpage based on layout given by the course teacher.)	
--	--	---	--

Activities/Practicum:

The following activity shall be carried out by the students.

Self Study:

❖ Study HTML elements: Paragraph, LineBreaks and Horizontal lines.

The following activity shall be carried out by the teacher.

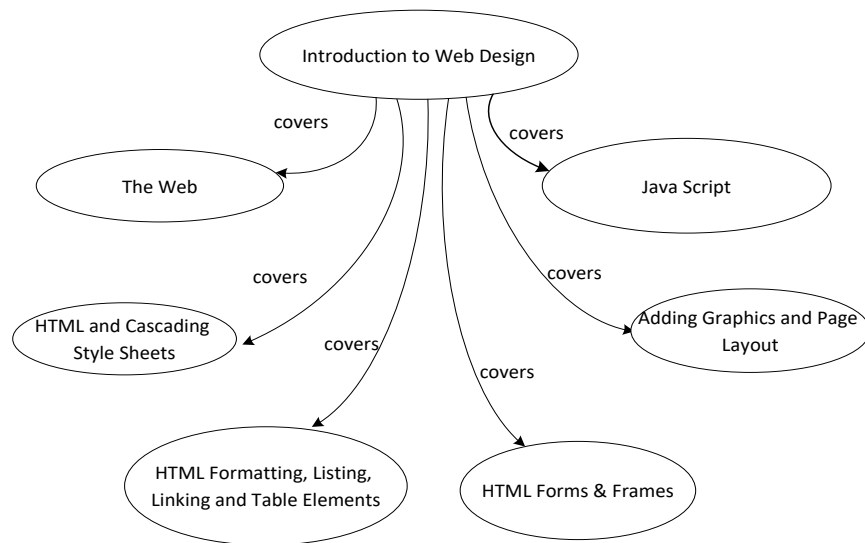
Learner	Activities to be done	PO mapped
For slow learners	Students have to solve question on black board which are assigned to them.	PO2
For advanced learners	Students have to write a code for layout which is provided by subject teacher.	PO2, PO6
For all	Assign 2 or 3 questions after the end of week, and students have to write in their note book. The best answer will be discussed in class.	PO2

Number of Practical Problems in Journal: 20

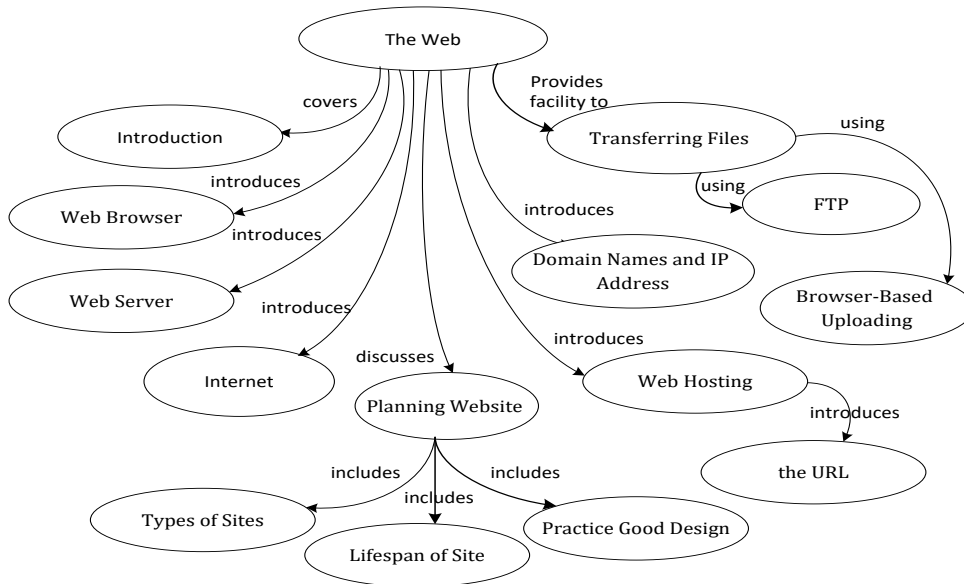
Total sets to be developed for each division: 02

Unit Number	Number of Questions	Time required to implement and debug the question (in hours)	Minimum required of Journal Certification
Unit -2	5	6	5
Unit -3	4	12	4
Unit -4	5	14	4
Unit -5	4	12	4
Unit -6	2	4	1
TOTAL	20	48	18

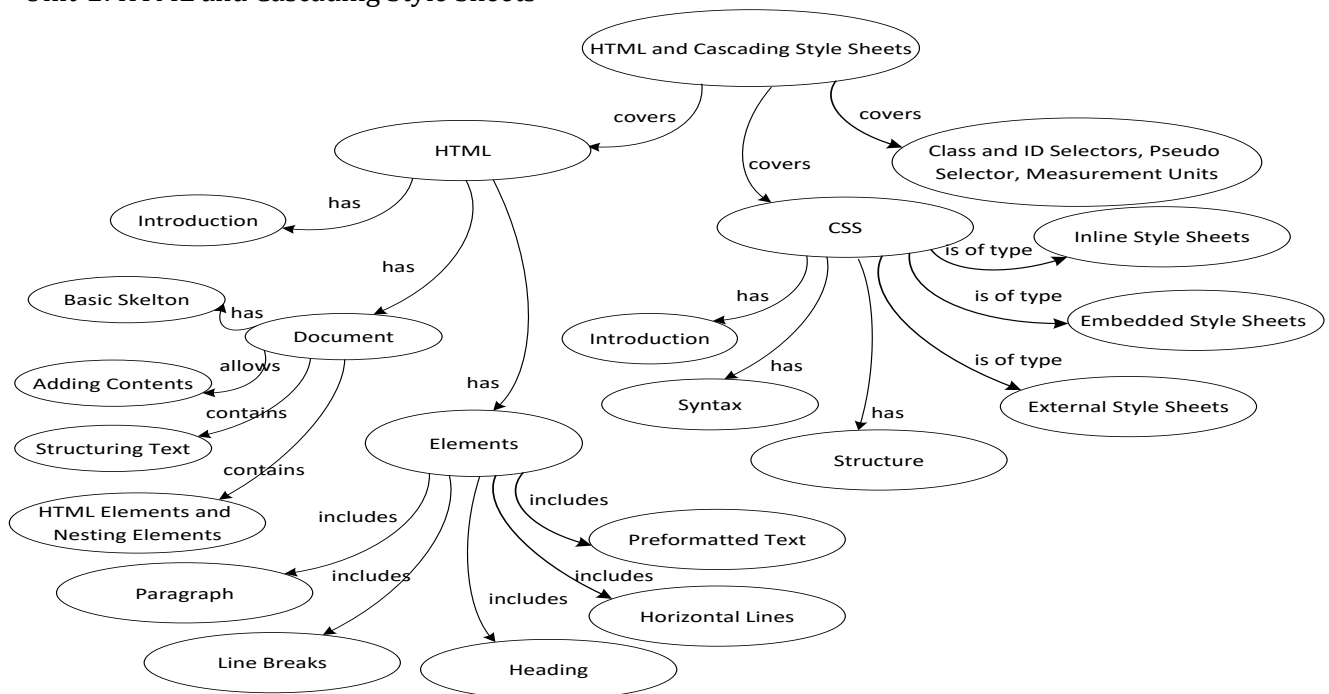
Concept Map:



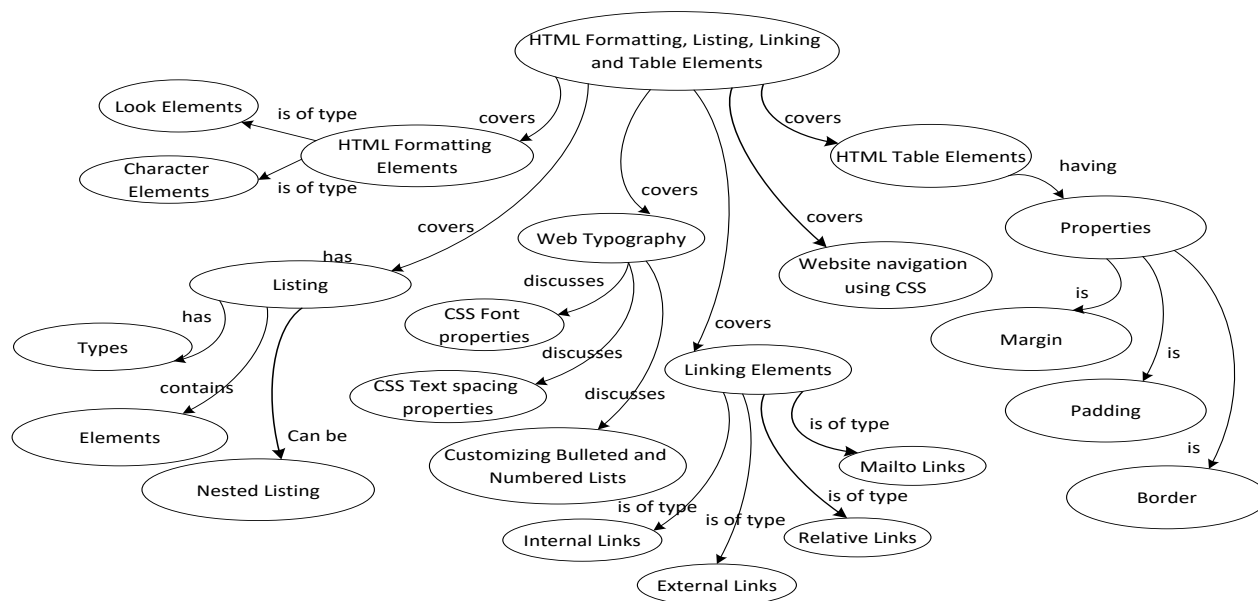
Unit-1: The Web



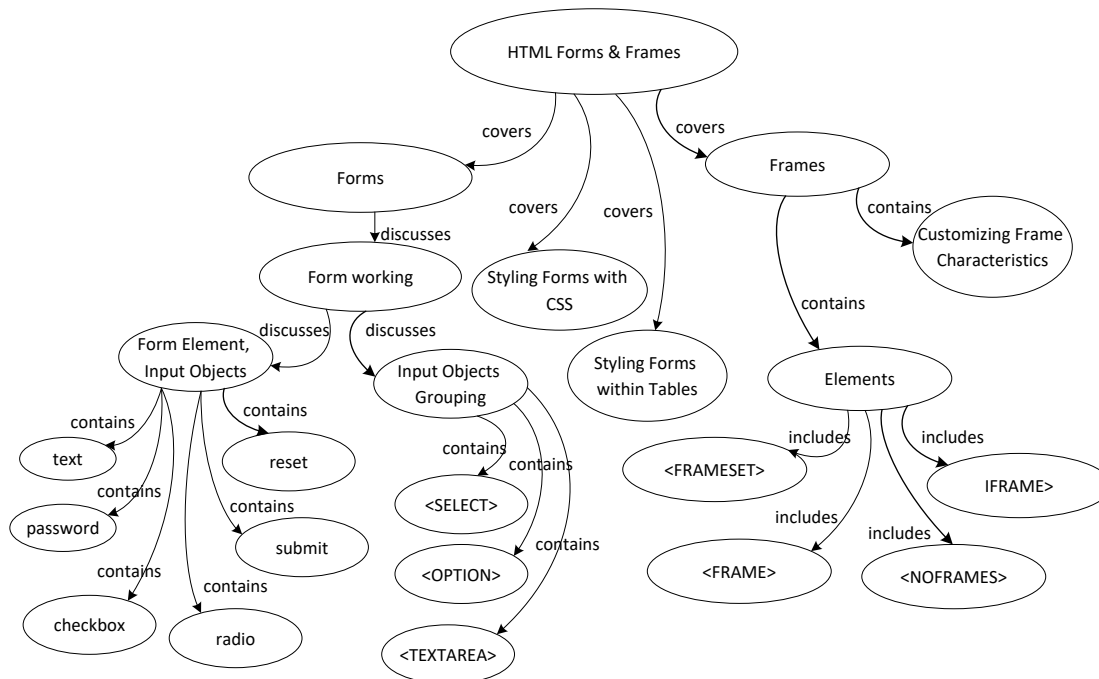
Unit-2: HTML and Cascading Style Sheets



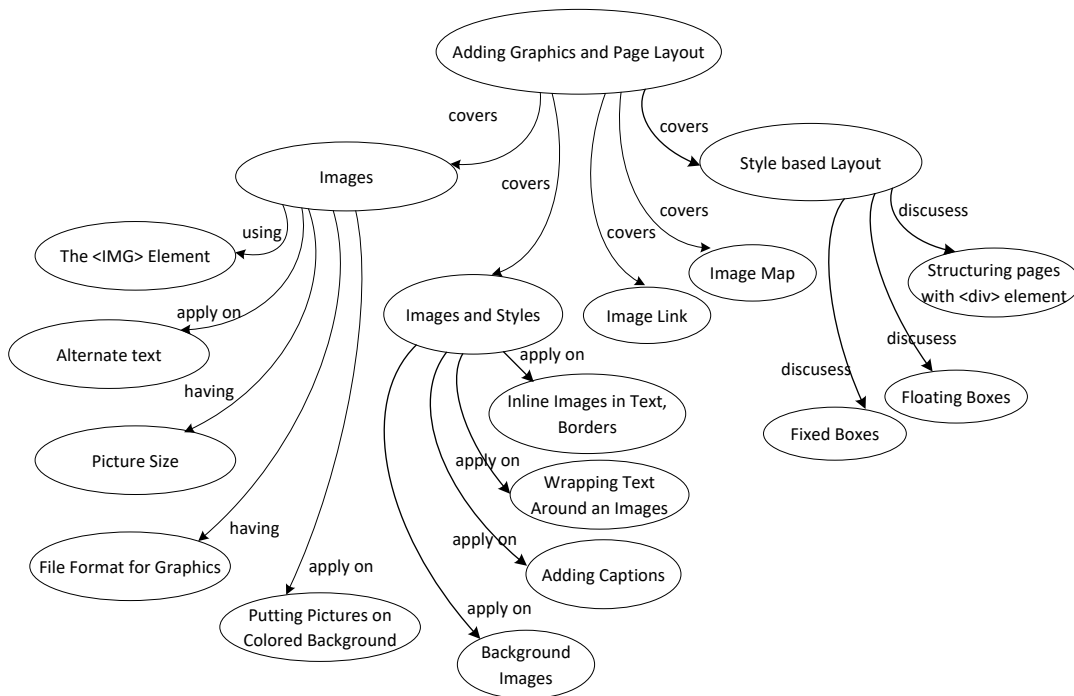
Unit-3: HTML Formatting, Listing, Linking and Table Elements



Unit-4: HTML Forms & Frames



Unit-5: Adding Graphics and Page Layout



Unit-6: JavaScript

