

	<b>Internal Exam</b>	<b>Assignment</b>	<b>Lab Assessment</b>	<b>End Semester Examinations</b>
CO 1	✓	✓		✓
CO 2	✓		✓	✓
CO 3	✓		✓	✓
CO 4	✓	✓	✓	✓

#### 4. INTRODUCTION TO WEB PROGRAMMING

Discipline	<b>COMPUTER SCIENCE</b>				
Course Code	UK1DSCCSC103				
Course Title	INTRODUCTION TO WEB PROGRAMMING				
Type of Course	<b>DSC</b>				
Semester	I				
Academic Level	1 -				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	3 hours	-	2 hours	5 hours
Pre-requisites	Nil				
Course Summary	<p>Web design is the planning and creation of websites. This includes a number of separate skills that all fall under the umbrella of web design. This course aims to instil in students these skills which includes information architecture, user interface, site structure, navigation, layout, colours, fonts, and overall imagery. It also trains students on basic web design elements like overall layout, colour scheme, typography, navigation and content. Simple web pages are designed using HTML5 and CSS3.</p>				

**Detailed Syllabus:**

<b>Module</b>	<b>Unit</b>	<b>Content</b>	<b>Hrs (L+P)</b>
<b>I</b>	<b>Basics of HTML5</b>		<b>15</b>
	1	HTML foundations, usage of Doctype and charset	
	2	Familiarisation of basic html tags including headings, paragraphs and text formats	
	3	Managing information with lists and tables	
	4	Making connections with links – hyperlinks, anchors, urls	
	5	Adding Images to your pages – Image and ImageMaps	
	6	Working with audio and video	
<b>II</b>	<b>Advanced Features in HTML5</b>		<b>15</b>
	7	Sectioning Elements – nav, article, main, header, footer and section tags	
	8	Progress Elements	
	9	Div and Frames	
	10	IFrames	
	11	Creating Forms using input elements	
<b>III</b>	<b>Introduction to CSS3</b>		<b>15</b>
	12	Style Element and Stylesheet	
	13	Specifying colors in CSS	

	14	Fonts and typefaces	
	15	Selectors – IDs, Classes and Pseudo classes	
	16	Borders and Backgrounds	
	17	Levels of CSS	
	18	Using HTML with CSS	
<b>IV</b>	<b>Stylesheets for high level visual designs</b>		<b>15</b>
	19	CSS3 Gradients	
	20	Special effects - images	
	21	Special effects - text	
	22	Introduction to Float Mechanism	
	23	Creating a basic two-column design	
	24	Creating dynamic lists	
	25	Building a basic menu system	
<b>V</b>	<b>Flexi Module: Not included for end semester exams</b>		<b>15</b>
	26	New features in HTML5 and CSS3,	
	27	Designing a static website of student's choice	
	28	Case study on some recent web designing tools.	

## References

### Core:

1. Andy Harris, "HTML5 and CSS3 All-in-one for Dummies", A Wiley Brand, Third Edition

**Additional:** <https://books.goalkicker.com/HTML5Book/>

## LAB EXERCISES

### Part A

1. Design a page having suitable background colour and text colour with title “My First Web Page” using all the attributes of the Font tag.
2. Create a HTML document giving details of your [Name, Age], [Address, Phone] and [Register\_Number, Class] aligned in proper order using alignment attributes of Paragraph tag
3. Create a page to show different character formatting (B, I, U, SUB, SUP) tags and heading tags
4. Create web pages using Anchor tag with its attributes for external links.
5. Create a web page with different sections and internal links using links and sectioning elements; when the user clicks on different links on the web page it should go to the appropriate locations/sections in the same page.
6. Create a web page, showing ordered list of semesters and an unordered list of names of all the Diploma Programmes (Branches) in your institution
7. Create a web page which divides the page in two equal frames and place the audio and video clips in frame-1 and frame-2 respectively

### Part B

8. Create a registration form using form input tags
9. Use tables to provide layout to your HTML page describing your college infrastructure
10. Create a table to show your class time table. Specify font and border attributes using css.
11. Write a program in html to design a Bio-Data and set style attributes in css using ids and selectors
12. Write a programme in html to create a webpage with four iframes (Picture, table, list, and hyperlink)
13. Design a web page with color background and give gradient effects using css.
14. Create a web page to show text and image special effects.
15. Design a static website for your institution containing at least five web pages (ensure to use iframes, forms, css including special effects, float mechanism and menu system).

### Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Illustrate the basic features of HTML5	Ap	PSO – 1, 2, 3
CO2	Use advanced HTML features for web designing	Ap	PSO – 1, 2, 3
CO3	Develop basic stylesheets in various CSS levels	Ap	PSO – 1, 2, 3
CO4	Develop stylesheets for high level visual designs	Ap	PSO – 1, 2, 3

**R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create**

*Note: 1 or 2 COs/module*

**Name of the Course: INTRODUCTION TO WEB PROGRAMMING**

**Credits: 3:0:1 (Lecture: Tutorial: Practical)**

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture(L)/ Tutorial(T)	Practical (P)
1	Illustrate the basic features of HTML5	PO – 3, 6, 7 PSO – 1, 2, 3	Ap	F, C, P, M	L	P
2	Use advanced HTML features for web designing	PO – 3, 6, 7 PSO – 1, 2, 3	Ap	F, C, P, M	L	P
3	Develop basic stylesheets in various CSS levels	PO – 3, 5, 6, 7 PSO – 1, 2, 3	Ap	F, C, P, M	L	P
4	Develop stylesheets for high level visual designs	PO – 3, 5, 6, 7 PSO – 1, 2, 3	Ap	F, C, P, M	L	P

**F-Factual, C- Conceptual, P-Procedural, M-Metacognitive**

**Mapping of COs with PSOs and POs :**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
<b>CO1</b>	-	-	3	-	-	3	3	-	2	1	2	-
<b>CO2</b>	-	-	3	-	-	3	3	-	2	1	2	-
<b>CO3</b>	-	-	3	-	1	3	3	-	2	1	2	-
<b>CO4</b>	-	-	3	-	1	3	3	-	2	1	2	-

**Correlation Levels:**

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

**Assessment Rubrics:**

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

**Mapping of COs to Assessment Rubrics:**

	Internal Exam	Assignment	Lab Assessment	End Semester Examinations
CO1	✓		✓	✓
CO2	✓	✓	✓	✓
CO3	✓		✓	✓
CO4	✓	✓	✓	✓