



Kot Bhalwal, Jammu

Model Institute of Engineering  
& Technology (Autonomous)  
**Course Handout**

## **COURSE HANDOUT**

WEB TECHNOLOGIES (BCAMI-106)

BCA-1<sup>ST</sup> SEMESTER

ACADEMIC YEAR (2024-25)

**Deepanshi**

Assistant Professor

PG Department of Computer Application



PG Department of Computer Application

Model Institute of Engineering & Technology (Autonomous)

Kot Bhalwal, Jammu - 181122

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Dr. Arun K. Gupta Teaching-Learning Centre

Version 1.1



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Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
							Sessional	Final Exam	Total
BCAMI-106	Web Technologies	Minor	4	4	0	0	40	60	100

### COURSE OUTCOMES

At the end of the course the student will be able to:	
CO1	Create well-structured HTML documents.
CO2	Apply CSS to create visually appealing and responsive web designs
CO3	Build user interactivity & create dynamic web content
CO4	Consolidate and manage data ensuring efficient data exchange.
CO5	Integrate server-side scripting for data processing

**Unit-I HTML:** Text Formatting Tags, META Tag, Adding Lists, Table, embedding objects, Paragraphs, Formatting, Links, Head, Images, Tables, Lists, Blocks, Layout, Forms, Colors, Color values, Frame and Form, Form Controls. Introduction to XHTML: XML, Move to XHTML, Meta tags, Character entities, frames, and frame sets, inside browser.

(10 Hours)

**Unit-II CSS:** Style Sheets: Need for CSS, introduction to CSS, basic syntax, and structure, In-line Styles, External Style Sheets, using CSS, background images, colors, and properties, manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning using CSS, CSS2, CSS3, Tailwind CSS

(10 Hours)

**Unit-III Client-side Scripting:** Introduction to JavaScript: JavaScript language – declaring variables, scope of variables functions, event handlers (on click, on submit etc.), Document Object Model, Form validations. Simple AJAX applications.

(10 Hours)

**Unit- IV XML:** Introduction to XML, uses of XML, simple XML, XML key components, DTD and Schemas, well formed, using XML with application.XML, XSL and XSLT. Introduction to XSL, XML transformed simple example, XSL elements, transforming with XSLT.

(10 Hours)

**Unit-V Introduction to PHP:** Declaring variables, data types, arrays, strings, operations, expressions, control structures, functions, reading data from web form controls like Text Boxes, radio buttons, lists etc., Handling File Uploads, Handling sessions and cookies. File Handling in PHP: File operations like opening, closing, reading, writing, appending, deleting etc. on text and binary files, listing directories.

(10 Hours)

### Textbooks

S.No	Name of the Books	Name of the Author	Publisher Name	Edition (Pub.Yr.)
1	Guide to HTML, CSS, JavaScript	Jennifer Niederst Robbins	O'Reilly Media.l	5th (2018)
2.	Web Applications: Concepts and Real-World Design	Knucklese	Wiley-India	2nd (2006)



### Reference Books

S.No	Name of the Books	Name of the Author	Publisher Name	Edition (Pub.Yr.)
1	HTML Black Book	Steven Holzne	Dremtech press.	8th(2020)

COURSE PLAN		
Unit-I HTML		
S.No	Topics	Recommended Books
1	Text Formatting Tags, META Tag,	Book 1, Ch.1
2	Adding Lists, Table, embedding objects, Paragraphs	Book 1, Ch.1
3	Layout, Forms, Colors, Color values, Frame and Form, Form Controls.	Book 1, Ch.1
4	Frame and Form, Form Controls.	Book 2, Ch.2
5	Introduction to XHTML: XML, Move to XHTML	Book 2, Ch.2
6	Meta tags, Character entities,	Book 2, Ch.2
7	Frames, and frame sets, inside browser.	Book 2, Ch.2
Unit-II CSS		
8	Introduction to CSS, Need for CSS, Basic Syntax and Structure	Book 1, Ch.3
9	In-line Styles, External Style Sheets, Using CSS	Book 1, Ch.3
10	Background Images, Colors and Properties	Book 1, Ch.3
11	Manipulating Texts, Using Fonts	Book 2, Ch.4
12	Borders and Boxes, Margins, Padding	Book 2, Ch.4
13	Lists, Positioning Using CSS	Book 2, Ch.4
14	CSS2, CSS3	Book 2, Ch.4
15	Tailwind CSS	Book 2, Ch.5
Unit-III Client-side Scripting		
16	Introduction to Java Script	Book 2, Ch.5
17	Declaring Variables, Scope of Variables, Functions	Book 2, Ch.5
18	Event Handlers (on click, on submit, etc.)	Book 2, Ch.5
19	Document Object Model	Book 2, Ch.5
20	Form Validations	Book 2, Ch.5
21	Simple AJAX Applications	Book 2, Ch.5
Unit-IV XML		
22	Introduction to XML, uses of XML, simple XML,	Book 1, Ch.6
23	XML Key Components,	Book 1, Ch.6
24	DTD and Schemas, Well-formed XML	Book 1, Ch.6
25	Using XML with Applications	Book 1, Ch.6
26	Introduction to XSL, XSL Elements	Book 1, Ch.6
27	XML Transformed Simple Example	Book 1, Ch.6
28	Transforming with XSLT	Book 1, Ch.6
Unit-V Introduction to PHP		



29	Declaring Variables, Data Types, Arrays, Strings, Operations, Expressions	Book 2, Ch.8
30	Control Structures, Functions	Book 1, Ch.8
31	Reading Data from Web Form Controls (Text Boxes, Radio Buttons, Lists, etc.)	Book 2, Ch.8
32	Handling Sessions and Cookies	Book 1, Ch.8
33	File Operations (Opening, Closing, Reading, Writing, Appending, Deleting) on Text and Binary Files	Book 2, Ch.8
34	Listing Directories	Book2, Ch. 8

### ADDITIONAL WEB RESOURCES

1.	<b>MOOC:</b> Web Applications for everybody specialization <a href="https://www.coursera.org/specializations/web-applications">https://www.coursera.org/specializations/web-applications</a>
2.	<b>NPTEL:</b> Video lectures on Web Technology Lecture series by Dr. Ashutosh Kumar Bhatt Uttarakhand Open University, Haldwani <a href="https://onlinecourses.swayam2.ac.in/nou24_cs09/preview">https://onlinecourses.swayam2.ac.in/nou24_cs09/preview</a>
3.	<b>Youtube Videos:</b> Video Lecture Java Script: <a href="https://www.youtube.com/watch?v=Kdz9J5vC4_o">https://www.youtube.com/watch?v=Kdz9J5vC4_o</a> Video Lecture on PHP: <a href="https://www.youtube.com/watch?v=EJWw1bd0-C0">https://www.youtube.com/watch?v=EJWw1bd0-C0</a> Video Lecture on XML: <a href="https://youtu.be/1JblVElt5K0?si=vfG63e0NinzkkYS2">https://youtu.be/1JblVElt5K0?si=vfG63e0NinzkkYS2</a>
4.	<b>Suggested Reading:</b> <a href="https://www.geeksforgeeks.org/web-development/">https://www.geeksforgeeks.org/web-development/</a> <a href="https://www.w3schools.com/css/css_intro.asp">https://www.w3schools.com/css/css_intro.asp</a>

### GRADING AND ASSESSMENT

- **Sessional Test:** 20 marks
- **Assignment:** 10 marks
- **Attendance:** 10 marks
- **Final Examination:** 60 marks

### COURSE POLICIES

- **Attendance:** Minimum 75% attendance is mandatory to appear in the final examination of the course.
- **Academic Integrity:** MIET's academic integrity policies apply. Plagiarism will not be tolerated.
- **Late Submissions:** Assignments and projects must be submitted by the specified timelines.

### FACULTY INFORMATION

- **Office Hours**

Monday (12:05 PM - 12:55 PM)

Friday (12:05 PM - 12:55 PM)

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- **Contact Information**  
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