

GOVT. POLYTECHNIC, HAMIRPUR (H.P.)
Lesson Planning and Coverage

Branch: Computer Engineering

Semester: 3rd

Subject: Web Technologies

Session: Aug-Dec 2026

Teacher: Ritesh Avasthi

Laboratory: Yes

Sr. No.	No of Lectures	Chapter/Unit Description	Detailed contents		Reference Resources	Remarks
1	08	Internet and World Wide Web	Brief History of the Internet, Structure of the Internet, Internet Services and Applications, Different Ways to Connect to the Internet, Common Internet Connection Issues and their Solutions, World Wide Web, HTTP, Familiarization with the Key Terms - Network Protocol, Web Server, Web Browser, Website, Web Application, Hypertext, Hyperlink, Search Engine, Proxy Server, URL, DNS		R1,R2	
2	08	HTML5	HTML, HTML Coding Conventions, HTML Tag, Structure of HTML Element, Global Attributes - id, class, style, title, tabindex; Structure of a Web Page - <html>, <head>, <body>, <!DOCTYPE>, <title> and <meta> Elements; HTML Comments, Document Object Model (DOM)		R3,R4	
3	10	HTML Basic Elements	Headings - <h1> ... <h6>; Paragraphs - <p>, Special Text Elements - <pre>, <code>, <q>, <var>; Lists : Ordered Lists (), Unordered Lists (); Attributes of List Elements: type, start; Nested Lists, Line Break () and Horizontal Rule (<hr>); Text Formatting Elements - , , , <i>, <mark>, <u>, <sub>, <sup>; Tables - <table>, <thead>, <tbody>, <tfoot>, <tr>, <th>, <td>, <colgroup>, <col>; Table Attributes - cellpadding, cellspacing, border, rowspan, colspan; Images - ; Image Attributes - src, alt; Hyperlink - <a>; Hyperlink Attributes - href, target;		R3,R4	
4	06	HTML Layout Elements	Block and Inline Elements, Creating Sections - <div>, ; Identifying Elements - id, class and name attributes; Frames - <iframe>; HTML5 Semantic Elements - <main>, <header>, <footer>, <article>, <section>, <nav>, <aside>, <details>, <summary>, <time>, <figure>		R3	
5	08	Cascading Style Sheets	CSS Types - Inline, Internal, External; <style> and <link> elements; CSS Rule, Selector and Declaration; CSS Length Units; CSS		R3	

			Box Model; Setting Margins, Borders and Padding of Elements; CSS Colors - Color Names, RGB and HEX Formats; Setting Colors of Text, Background and Border; Styling Text - font-family, font-size, font-style, font-weight, font-transform, text-decoration, text-align; CSS Layout - position and float; Flexbox and Grid layouts; Styling Tables and Lists; Basic Animation using CSS, CSS Pseudo Elements and Pseudo Classes			
6	08	Javascript	Role of Javascript in a Web Page, Embedding Javascript Code in Web Page, Javascript Variables - Naming, Scope and Lifetime, Hoisting; Javascript Operators, Control Statements; Javascript Arrays; Linking External Javascript File; Accessing and Manipulating HTML DOM Elements with Javascript; JavaScript, Builtin Javascript Functions, User-defined Functions		R4	

References:

- R1. "Web Technologies--A Computer Science Perspective", Jeffrey C. Jackson,
R2. Web programming - Building Internet Application, Chris Bales.
R3. HTML & CSS: Design and Build Websites, John Ducket, Wiley Publishing
R4. <https://www.w3schools.com> - HTML, CSS and Javascript Tutorials.

COURSE OUTCOMES:

After completing this course students will be able to:

- CO-1 Understand the Internet and WWW terminology.
CO-2 Utilize the Internet services like email, www and FTP.
CO-3 Connect a computer to the Internet and troubleshoot common network issues.
CO-4 Develop basic static websites using HTML, CSS and Javascript.

Signature of Teacher with Date

Signature of HOD