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| --- | --- | --- | --- | --- | --- | --- |
| **Subject Code**  **20CST315** | **WEB TECHNOLOGIES** | **L** | **T** | **P** | **S** | **C** |
| **Total Contact Hours : 30 Hours** | **2** | **0** | **0** | **0** | **2** |
|  | | | | | |
| **Pre-requisites:** | HTML, java script, bb script | | | | | |
| **Co-requisites** | Java script | | | | | |
| **Anti-Requisites** | Multimedia | | | | | |

**Course Objectives:**

* This Subject is useful for Making own Web page and how to host own web site on internet. Along with that Students will also learn about the protocols involve in internet technology.

**Course Outcomes: (5 Required)**

* To know the History and development of the World Wide Web and associated technologies.
* To know and apply the concept of client-server architecture of the World Wide Web and its communication protocol HTTP/HTTPS.
* To choose the Formats and languages used in modern web-pages: HTML, XHTML, CSS, XML, XSLT, JavaScript, DOM.
* To apply Programming web pages with JavaScript/DOM (client)
* To implement Good design, universal design, multi-platform web applications.

**Contents of the Syllabus:**

**UNIT-I [10h]**

**Chapter-1(Introduction)**

**Introduction to WWW:** Protocols and programs, secure connections, application and development tools, the web browser, What is server, choices, setting up UNIX and Linux web servers, Logging users, dynamic IP

**Web Design**: Web site design principles, planning the site and navigation.

**Chapter-2(Introduction to HTML)**

**Introduction to HTML:** The development process, Html tags and simple HTML forms, web site structure **Introduction to XHTML** : XML, Move to XHTML, Meta tags, Character entities, frames and frame sets, inside browser.

**UNIT-II [10h]**

**Chapter -3(Style Sheets)**

Need for CSS, introduction to CSS, basic syntax and structure, using CSS, background images, colors and properties, manipulating texts, using fonts, border sand boxes, margins, padding lists, positioning using CSS, CSS2.

**Chapter -4(Java Script)**

**Javascript**: Client side scripting, What is Javascript, How to develop Javascript, simple Javascript, variables, functions, conditions, loops and repetition

**Advance script**, Javascript and objects, Javascript own objects, the DOM and web browser environments, forms and validations

**DHTML** : Combining HTML, CSS and Javascript, events and buttons, controlling your browser, **Ajax:** Introduction, advantages & disadvantages ,Purpose of it ,ajax based web application, alternatives of ajax.

**UNIT-III [10h]**

**Chapter -5 (XML)**

**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.

**Chapter -6 (PHP)**

Hash Table, Hash Functions, Collision Resolution Strategies, Hash Table Implementation.

**TEXT BOOKS/REFERENCE BOOKS**

1. Steven Holzner, ”HTML Black Book”, Dremtechpress.
2. Web Technologies, Black Book, DreamtechPress
3. Web Applications : Concepts and Real World Design, Knuckles,Wiley-India
4. Internet and World Wide Web How to program, P.J. Deitel& H.M. DeitelPearson..

# Mode of Evaluation: The performance of students is evaluated as follows:

|  |  |  |
| --- | --- | --- |
|  | **Theory** | |
| **Components** | **Continuous Internal Assessment (CAE)** | **Semester End Examination (SEE)** |
| **Marks** | **40** | **60** |
| **Total Marks** | **100** | |

**Relationship between the Course Outcomes (COs) and Program Outcomes (POs)**

|  |  |  |
| --- | --- | --- |
| **Mapping Between COs and Pos** | | |
| **SN** | **Course Outcome (CO)** | **Mapped Programme Outcome (PO)** |
| 1 | CO1 | PO1 |
| 2 | CO2 | PO5 |
| 3 | CO2 | PO2 |
| 4 | CO4 | PO12 |
| 5 | CO5 | PO9, PO12 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COs** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | 3 | – | -- | – | – | – | – | – | – | – | – | – | – | -- |
| **CO2** | -- | – | – | – | 3 | – | -- | – | - | – | – | – | – | – |
| **CO3** | - | 3 | -- | – | -- | – | -- | -- | – | – | – | – | – | – |
| **CO4** | -- | -- | -- | – | – | – | – | -- | -- | – | – | – | – | 3 |
| **CO5** | --- | -- | -- | -- | – | – | – | – | 3 | – | – | – | – | 3 |

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|  |  | **Engineering Knowledge** | **Problem analysis** | **Design/development of solutions** | **Conduct investigations of complex** | **Modern tool usage** | **The engineer and society** | **Environment and sustainability** | **Ethics** | **Individual or team work** | **Communication** | **Project management and finance** | **Life-long Learning** |
| Course Code | Course Name | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **1**  **0** | **1**  **1** | **12** |
| **20ITT-373** | **WEB TECHNOLOGIES** |  |  |  |  |  |  |  |  |  |  |  |  |

1 = addressed to small extent

2 = addressed significantly

3 = major part of course