Certificate in Computer Fundamentals (105) – HTML Internet Technology

Prerequisites: Basic computing knowledge	**Corequisites:** A pass or higher in Certificate in Information Systems or equivalence.
Aim: The course covers the basic principles of web page construction, editing and formatting HTML documents. Hypertext Markup Language (HTML) is the language that drives the World Wide Web. HTML is the core computer language used to create web pages. Candidates learn how HTML fits into the web design process, use HTML to format text, insert hyperlinks, place images, and organise pages with tables. The use of frames and forms to create more advanced web pages, make hyperlinks to other pages, make tables, build forms, embed and optimise images is also covered.	
Required Materials: Recommended Learning Resources.	**Supplementary Materials:** Lecture notes and tutor extra reading recommendations.
Special Requirements: This is a hands-on course, hence use of computers is mandatory.	

Intended Learning Outcomes:	Assessment Criteria:
1 Describe how a browser displays a Web page. Explain what HTML is and how Web pages use HTML. Explore the structure of the World Wide Web. Learn the basic principles of Web documents. Develop a Basic Web Page.	1.1 Demonstrate how to create a HTML document 1.2 Identify how to view a HTML file using a Web browser 1.3 Identify how to use HTML tags for text, headings, paragraphs, and lists 1.4 Learn to insert character tags into an HTML document 1.5 Illustrate how to insert an inline graphic image into a HTML document 1.6 Describe how to add special characters to an HTML document 1.7 Demonstrate how to insert horizontal lines into an HTML document.
2 Describe how to add Hypertext Links to a Web Page. Define the types of hyperlinks. Add absolute URLs and relative URLs. Describe how to add named anchors. Discuss the problem of link maintenance.	2.1 Describe how to create hypertext links between elements within a Web page 2.2 Describe how to create hypertext links between Web pages 2.3 Review basic Web page structures 2.4 Describe how to create hypertext links to Web pages on the Internet 2.5 Distinguish between and be able to use absolute and relative pathnames 2.6 Describe how to create hypertext links to various Internet resources, including FTP servers and newsgroups.
3 Work with Fonts, Colors, and Graphics. Demonstrate how to add colors to a Web page. Explain how to add background patterns. Describe how to add images to a Web page. Explain the use of relative addresses for image files. Identify when to employ the GIF, JPEG, and PNG file formats.	3.1 Demonstrate how HTML handles color 3.2 Describe how to create a color scheme for a Web page 3.3 Work with font sizes, colors, and types 3.4 Demonstrate how to place a background image on a Web page 3.5 Define colors for a Web page and for specific characters 3.6 Analyse how to control the placement and appearance of images on a Web page

	3.7	Demonstrate working with client-side image maps
4 Design a Web Page with Tables. Describe the structure of HTML tables. Define table attributes. Describe how tables can be used to format text and graphics.	4.1	Demonstrate how to create a text table
	4.2	Describe how to create a table using the **<table>**, **<tr>**, and **<td>** tags
	4.3	Describe how to create table headers and captions
	4.4	Define how to control the appearance of a table and table text
	4.5	Describe how to create table cells that span several rows or columns
	4.6	Describe how to use nested tables to enhance page design
5 Demonstrate how to use Frames in a Web Site. Construct frame-based displays. Describe how frames can be used to facilitate Web site navigation.	5.1	Outline the process of creating frames for a Web site
	5.2	Describe how to control the appearance and placement of frames
	5.3	Describe how to control the behavior of hyperlinks on a Web page with frames
	5.4	Use reserved target names to specify a target for a hypertext link
	5.5	Describe how to modify the appearance of frame borders
	5.6	Analyse how to create and implement floating frames.
6 Analyse Web Page Forms. Create forms. Outline the importance of forms as the only way users can interact with a site.	6.1	Learn about CGI scripts
	6.2	Review the various parts of an online form
	6.3	Describe how to create form elements
	6.4	Describe how to create a hidden field on a form
	6.5	Illustrate how to work with form attributes
	6.6	Learn how to send data from a form to a CGI script
	6.7	Learn how to send form information without using CGI scripts.
7 Describe Cascading Style Sheets	7.1	Learn about the history and theory of cascading style sheets
	7.2	Describe how to create inline styles, embedded styles, and style sheets
	7.3	Describe style precedence and style inheritance
	7.4	Demonstrate how to use cascading style sheets to format paragraphs, lists, and headings
	7.5	Define document content with the class and id attributes and create styles for them
	7.6	Describe how to mark document content with the **<div>** and **<span>** tags and create styles for them
	7.7	Describe how to use cascading styles to design page layout.

Recommended Learning Resources: HTML Internet Technology

Text Books	• HTML, XHTML, and CSS, Sixth Edition (Visual Quickstart Guide) by Elizabeth Castro. ISBN-10: 0321430840 • Build Your Own Website The Right Way Using HTML & CSS by Ian Lloyd. ISBN-10: 0975240293 • The Ultimate HTML Reference by Ian Lloyd. ISBN-10: 0980285887
Study Manuals	BCE produced study packs
CD ROM	Power-point slides
Software	Internet Explorer