WEB DESIGN SKILLS

UNIT CODE: ICT/CU/CS/CR/10/6/B

Relationship to Occupational Standards

This unit addresses the unit of competency**:** Demonstrate Web Design Skills

Duration of Unit: 200 hours

Unit Description:
This unit covers the competencies required to demonstrate web design skills. It involves understanding HTML basics, using HTML elements, demonstrating web page formatting, applying styles, understanding JavaScript basics, using JavaScript data types, using JavaScript functions and using JavaScript libraries.

Summary of Learning Outcomes:
1. Understand HTML basics
2. Use HTML elements
3. Demonstrate web page formatting
4. Apply styles
5. Understand JavaScript basics
6. Use JavaScript data types
7. Use JavaScript functions
8. Use JavaScript libraries

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Method
1. Understand HTML basics	- Definition of HTML - HTML terminologies - Document - Stylesheet - Element - Attribute - Creation of HTML file - Document type declaration - Saving as .html file - HTML core elements <head> <title>	- Practical tests - Written tests - Oral tests

	• <body> • <html> • Addition of HTML core elements to file	

2. Use HTML elements	• Basic HTML elements
	   • <p>
	   •
	   • <h1>
	• Addition of basic HTML elements to HTML document
	• Definition of attributes
	   • src
	   • alt
	   • href
	• Addition of attributes to elements
		• Practical tests
		• Written tests
		• Oral tests

3. Demonstrate web page formatting	• Layout elements
	   • <header>
	   • <nav>
	   • <section>
	   • <footer>
	• Addition of layout elements to HTML document
	• Addition of layout element attributes to HTML document
	   • class
	   • id
	   • name
		• Practical tests
		• Written tests
		• Oral tests

4. Apply Styles	• Style concepts
	   • background
	   • padding
	   • alignment
	   • border
	• Application of internal styles
	• Creation of external CSS file
		• Practical tests
		• Written tests
		• Oral tests

5. Understand JavaScript basics	• Purpose of JavaScript • JavaScript syntax	• Practical tests • Written tests • Oral tests

	• Accessing HTML element attributes using the JavaScript Document Object Model (DOM) • Changing HTML element attributes using JavaScript DOM model	

6. Use JavaScript data types	• JavaScript data types
	  • Strings
	  • Numbers
	  • Booleans
	• Demonstration of data type operations
	  • Variables declarations and scope
	  • Expressions
	    • Arithmetic
	    • Boolean
	    • String concatenation
	• Demonstration on arrays operations
	  • count ()
	  • pop ()
	  • push()
		• Practical tests
		• Written tests
		• Oral tests

7. Use JavaScript functions	• JavaScript function structure • Creation of JavaScript function • Invoking of JavaScript function • Returning values from functions	• Practical tests • Written tests • Oral tests

8. Use JavaScript libraries	• Libraries concept
	• JQuery framework
	• Installation of JQuery
	• Referencing JQuery
	• JQuery syntax
	• JQuery events
	  • Keyboard
	  • Mouse
	  • Form
	  • Document Window
	• DOM manipulation with JQuery
		• Practical tests
		• Written tests
		• Oral tests

Suggested Methods of Instruction

- Presentations and practical demonstrations by trainer;
- Guided learner activities and research to develop underpinning knowledge;
- Supervised practical assignments and projects

Recommended Resources

Tools

- Text Editor
- Browser

Equipment

- Computer

Materials and supplies

- Instructional materials
- Stationery

Reference materials

- Trainer-recommended resources including web resources