WEB DESIGN CURRICULUM

1.0 Introduction

This curriculum provides a structured approach to learning web design and development, covering foundational concepts, practical skills, and basic topics necessary for building modern websites and web applications. Adjustments can be made based on the specific goals, learning pace, and level of expertise of the students. Practical projects and hands-on exercises are essential to reinforce learning and prepare students for real-world scenarios in the field of web design.

2.0 Course Overview

This Web Design course is designed to equip students with the skills and knowledge necessary to create visually appealing, user-friendly, and functional websites. The course covers fundamental concepts of web design, including HTML, CSS, JavaScript, responsive design, and user experience (UX) principles. Through hands-on projects and real-world examples, students will learn how to design and develop websites from scratch, ensuring they are optimized for performance and accessibility.

3.0 Learning Objectives

By the end of this course, students will be able to:

1. Understand the basics of HTML and CSS for structuring and styling web pages.
2. Utilize JavaScript to add interactivity to web pages.
3. Create responsive web designs that work on various devices and screen sizes.
4. Apply user experience (UX) principles to enhance the usability and functionality of websites.
5. Develop a strong foundation in visual design principles, including color theory, typography, and layout.
6. Use web design tools and frameworks effectively.
7. Optimize websites for performance and search engines (SEO).
8. Implement accessibility standards to make websites usable for everyone.

4.0 Learning Outcome

At the end of study, the students will be equip with a range of knowledge, skills, and competencies necessary to succeed in the field of web design and development. The expected outcomes or goals to be achieved include:

Knowledge and Understanding

1. **Understanding of Web Technologies**: Students should grasp fundamental concepts of web technologies including HTML, CSS, JavaScript, and their roles in creating interactive and responsive websites.
2. **Design Principles**: Acquire knowledge of design principles such as layout, typography, color theory, and user experience (UX) design, enabling students to create visually appealing and user-friendly interfaces.
3. **Back-End Development Basics**: Gain an understanding of server-side scripting, databases, and content management systems (CMS), allowing students to develop dynamic and database-driven web applications.
4. **Advanced Techniques**: Learn advanced front-end techniques, web performance optimization strategies, security considerations, and integration of APIs, preparing students to build scalable and efficient web solutions.

Skills Development

1. **Coding Skills**: Develop proficiency in HTML, CSS, and JavaScript for creating and styling web pages, implementing interactivity, and ensuring cross-browser compatibility.
2. **Responsive Design**: Master techniques for designing websites that adapt to various screen sizes and devices, enhancing user experience across desktops, tablets, and mobile phones.
3. **CMS Customization**: Gain hands-on experience in customizing and managing content using popular CMS platforms like WordPress or Drupal, understanding themes, plugins, and SEO best practices.
4. **Project Management**: Acquire project management skills through planning and executing web development projects, adhering to timelines, and collaborating effectively with team members.

Practical Application

1. **Portfolio Development**: Create a professional portfolio showcasing projects developed during the course, demonstrating proficiency in web design, front-end development, and back-end implementation.
2. **Capstone Project**: Implement a comprehensive web application from concept to deployment, applying acquired skills in design, front-end and back-end development, and integrating third-party APIs as needed.

Professional Readiness

1. **Job Readiness**: Prepare students for entry-level positions in web design and development, equipping them with resume writing, job search strategies, and interview preparation skills.
2. **Continued Learning**: Foster a mindset of lifelong learning in web technologies and trends, encouraging students to stay updated with industry advancements and best practices.

Soft Skills Enhancement

1. **Communication and Collaboration**: Develop communication skills necessary for effective collaboration with clients, designers, developers, and stakeholders in web projects.
2. **Problem-Solving and Critical Thinking**: Cultivate problem-solving abilities and critical thinking skills to analyze requirements, troubleshoot issues, and propose innovative solutions in web development.

5.0 Course Outline
Module 1: Introduction to Web Design

- History and evolution of web design
- Overview of web technologies
- Basic concepts of web design

Module 2: HTML and CSS Fundamentals

- HTML structure and elements
- CSS syntax and selectors
- Styling text, images, and layout
- Creating forms and tables

Module 3: JavaScript for Web Design

- Introduction to JavaScript
- Basic syntax and programming concepts
- Manipulating the DOM
- Event handling and interactivity

Module 4: Responsive Web Design

- Principles of responsive design
- Media queries and flexible grids
- Designing for different devices
- Testing and debugging responsive designs

Module 5: User Experience (UX) Design

- Understanding UX principles
- User research and personas
- Wireframing and prototyping
- Usability testing

Module 6: Visual Design Principles

- Color theory and psychology
- Typography and fonts
- Layout and composition
- Creating visual hierarchies

Module 7: Tools and Frameworks

- Introduction to design tools (Adobe XD, Figma, Sketch)
- Using CSS frameworks (Bootstrap, Tailwind CSS)
- Version control with Git and GitHub

Module 8: Website Optimization and SEO

- Website performance optimization
- SEO best practices
- Analytics and tracking

Module 9: Accessibility in Web Design

- Importance of web accessibility
- Accessibility standards and guidelines (WCAG)
- Implementing accessible design practices

Module 10: Final Project

- Designing and developing a complete website
- Applying learned skills and techniques
- Peer review and feedback

6.0 Assessment Methods
- Quizzes and assignments
- Practical projects and exercises
- Final project presentation and evaluation
- Peer reviews and group discussions

7.0 Prerequisites
- Basic understanding of computer usage
- Familiarity with internet browsing

8.0 Course Duration
- 12 weeks (3 hours per week)

9.0 Certification
Upon successful completion of the course, students will receive a Certificate of Web Design.

10.0 Enrollment Information

- Course fee: **KSH 72,000**
- Enrollment deadline: [Insert Date]
- Start date: [Insert Date]