هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Web Technology 1**
Course Code:	**ITXXXX**
Program:	**Information Technology**
Department:	**Information Technology**
College:	**Computer Science and Information Technology**
Institution:	**Albaha University**
Version:	*Course Specification Version Number*
Last Revision Date:	**3 April 2023**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3 Hours				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:5th					
4. Course general Description **Lecture:** During the lectures, the instructor will introduce and explain the fundamental concepts and technologies of web development. Students will learn the basics of HTML, CSS, and JavaScript and how to use them to create simple websites. The instructor will also cover web design principles, accessibility, and responsive design. Students will have the opportunity to ask questions and participate in discussions. **Lab:** In the lab sessions, students will work on practical exercises and assignments that reinforce the concepts and skills covered in the lectures. Students will have access to computers and web development software to work on their assignments. The lab sessions will be guided by the instructor, who will provide feedback and assistance as needed. Students also can work collaboratively and share ideas with their peers. The combination of lectures and labs will provide students with a comprehensive understanding of web development. By the end of the course, students will have gained hands-on experience in creating simple, responsive websites and will be well-equipped to pursue further studies in web development or related fields.					
5. Pre-requirements for this course (if any):					
6. Co- requirements for this course (if any):					
7. Course Main Objective(s) **The main objective for this course is to teach students how to:** ▪ Identify the role of underpinning web technologies in the development of web applications. ▪ Ensure that high-quality web applications are constructed using the necessary processes and procedures. ▪ Demonstrate front-end frameworks. ▪ Demonstrate proficiency in HTML, CSS, and JavaScript basics ▪ Describe the Web site creation process.					

- Create web pages that are accessible to all users, using HTML, HTML5, CSS, JavaScript.
- Design and implement a simple, responsive website.
- Apply best practices in web development.
- Critically analyze and evaluate web content and design choices.
- Interact in groups collaboratively.
- Communicate concepts and techniques in oral presentations.

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	44	100%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	22
2.	Laboratory/Studio	22
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	44

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Describe, compare, and contrast mark-up languages and explain browsers and internet technology.	K1	Lectures Class discussions	Homework Midterm Exam Final Exam
1.2	Discuss standards and web technologies and web application architecture.	K2	Lectures Class discussions	Homework Midterm Exam Final Exam
1.3	identify and apply web design principles such as typography, color theory, and layout design..	K3	Class discussions Assignments	Homework Midterm Exam Final Exam
1.4	Demonstrate proficiency in HTML, CSS, and JavaScript	K4	Lectures Class discussions	Homework Midterm Exam Final Exam
2.0	Skills			
2.1	implement responsive design principles to ensure that their websites are accessible on a variety of devices.	S1	Lectures Assignments Lab	Homework Lab Exam
2.2	Explain and demonstrate React, and jQuery methods.	S2	Lectures Assignments Lab	Homework Lab Exam Final Exam
2.3	Demonstrate front-end frameworks.	S3	Lectures Assignments Lab	Final Exam

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.4	Design and develop a responsive website using HTML, CSS, and JavaScript.	S4	Lecture Lab	Homework Lab Exam
2.5	identify and solve web development problems using critical thinking and problem-solving skills	S5	Lab	Lab Exam
3.0	Values, autonomy, and responsibility			
3.1	Participate in groups collaboratively.	V1	Team-based learning	Homework

C. Course Content

No	List of Topics	Contact Hours
	Lectures	
Part 1: Introduction		
1.	Introduction to Web Technologies	1
2.	Web application architecture	1
3.	Introduction to HTML 5, CSS 3 and JavaScript	2
Part 2: Client-side scripting and styling		
4.	Essential HTML5 tags and attributes	2
5.	Introduction to CSS3: selectors, properties, and values	2
6.	Introduction to JavaScript: variables, data types and functions	4
7.	Web forms: HTML 5 input types and validation	4
8.	Web Design Principles	2
Part 3: Front-end frameworks		
9.	React and jQuery	4
	Total	22

	Labs	
1.	Lab. 1: Introduction to HTML5 • Creating a basic HTML document • Using HTML tags for headings, paragraphs, lists, and links • Adding images and videos to a web page • Creating forms and input fields	4
2.	Lab. 2: Introduction to CSS • Adding CSS styles to an HTML document	4

	• Applying styles to text, fonts, colors, and backgrounds • Creating layout and positioning elements with CSS •	
3.	Lab 3: Introduction to javaScript • Adding JavaScript to an HTML document • Using variables and data types in JavaScript • Writing functions and conditional statements	6
4.	Lab 4: Design Principle and accessibility • Applying design principles such as typography, color, and layout to web pages • Testing web pages for accessibility and usability	4
5.	Lab. 5: Frameworks and libraries. • Introduction to popular front-end frameworks React • Using CSS preprocessors such as SASS or LESS • Using libraries such as jQuery for front-end interactivity and animations	4
Total		22

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Homework	Week 3,7,10	15%
2.	Midterm exam	Week 6	15%
3.	Quiz	Week 8	10%
4.	Lab Exam	Week 10	20%
5.	Final Exam	Week 13	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	• Sklar, J. (2015). *Principles of web design*. Boston, Ma: Cengage Learning. • Harris, A 2014, *HTML5 and CSS3 all-in-one for dummies*, John Wiley & Sons, Inc, Hoboken, New Jersey. • Suehring, S. and Valade, J. (2013). *PHP, MySQL, JavaScript & HTML5 all-in-one for dummies*. Hoboken, Nj: John Wiley & Sons, Inc.
Supportive References	• Blum, R. (2018). *PHP, MYSQL, & JavaScript all-in-one for dummies*. Hoboken, New Jersey: John Wiley & Sons, Inc. • Meloni, J.C. and Kyrnin, J. (2018). *HTML, CSS, and JavaScript All in One*. Sams Publishing. • Robbins, J. (2018). *Learning Web Design*. 'O'Reilly Media, Inc.'
Electronic Materials	• Access to the Saudi Digital Library (SDL). • Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/). • https://www.w3schools.com/html/default.asp • How to make a website with Google Sites • https://www.thoughtco.com/make-website-with-google-sites-4800051#toc-how-to-build-a-website-with-google-sites • Codecademy https://www.codecademy.com/learn
Other Learning Materials	None

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	A classroom or lecture hall with whiteboard for 25 students.
Technology equipment (projector, smart board, software)	• A digital image projection system with connection to desktop computer or laptop computer. • High-speed Internet connection. • An instructor computer station.
Other equipment (depending on the nature of the specialty)	A laboratory with: 25 computers with Windows.

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students Peer Reviewer Program Leader	Indirect: Survey Direct: Peer Review Direct: Class Visits
Effectiveness of students assessment	Exams Evaluation Committee Students	Direct: Exam Review Indirect: Survey
Quality of learning resources	Faculty Students	Indirect: Survey Indirect: Survey
The extent to which CLOs have been achieved	Faculty	Direct: Exams
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	