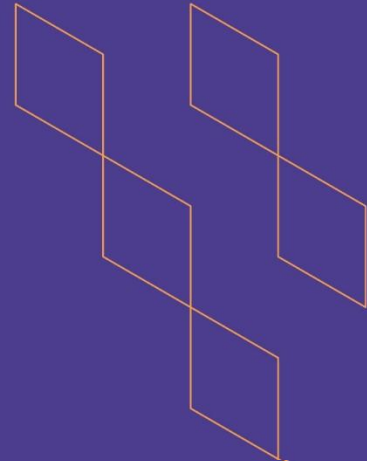




T-104  
2022

## Course Specification



Course Title:	<b>Web Programming and Design</b>
Course Code:	<b>CS0135</b>
Program:	<b>Computer Sciences</b>
Department:	<b>Applied Sciences</b>
College:	<b>Applied College</b>
Institution:	<b>Imam Mohammad Ibn Saud Islamic University</b>
Version:	<i>Course Specification Version Number</i>
Last Revision Date:	<i>Pick Revision Date.</i>



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## A. General information about the course:

Course Identification	
1. Credit hours:	3 (2 Theory, 2 Lab)
2. Course type	
a. University <input type="checkbox"/>	College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Track <input type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>
3. Level/year at which this course is offered:	Level 2
4. Course general Description	
5. Pre-requirements for this course (if any): CS0115	
6. Co- requirements for this course (if any): None	
7. Course Main Objective(s)	

### 1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	4 hours/week	100%
2.	E-learning		
3.	Hybrid <ul style="list-style-type: none"> <li>Traditional classroom</li> <li>E-learning</li> </ul>		
4.	Distance learning		

### 2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	24
2.	Laboratory/Studio	24
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	48



## 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				
1.2				
...				
2.0	Skills			
2.1				
2.2				
...				
3.0	Values, autonomy, and responsibility			
3.1				
3.2				
...				

## C. Course Content

No	List of Topics	Contact Hours
1.	<b>Web Design:</b> <ul style="list-style-type: none"> <li>• Frontend Versus Backend</li> <li>• Design</li> <li>• Development</li> <li>• Content Strategy</li> <li>• Multimedia</li> <li>• HTML</li> <li>• CSS</li> <li>• JavaScript</li> <li>• Server-Side Programming and Database Management</li> </ul> <b>How is The Web Work:</b> <ul style="list-style-type: none"> <li>• The Internet Versus the Web</li> <li>• A Brief History of the Web</li> <li>• How You Reach a Website?</li> <li>• Browsers</li> <li>• HTTP</li> <li>• DNS</li> <li>• Web Page Addresses (URLs)</li> <li>• Website Types</li> <li>• Website Components</li> <li>• The Anatomy of a Web Page</li> </ul>	4
2.	<ul style="list-style-type: none"> <li>○ <b>Hypertext Markup Language (HTML):</b> <ul style="list-style-type: none"> <li>• HTML Editing Tools</li> <li>• Creating a Simple Page</li> </ul> </li> </ul>	14





	<ul style="list-style-type: none"> <li>• Basic HTML Document Structure P88</li> <li>• HTML Components</li> <li>• Information Browsers Ignores</li> <li>• Paragraphs and Headings (Block-Level Elements)</li> </ul> <ul style="list-style-type: none"> <li>○ <b>Fonts, Colors, and General Formatting in HTML</b></li> <li>○ <b>Inserting Interactive Objects with HTML</b></li> <li>○ <b>Insert Links with HTML</b></li> <li>○ <b>Insert Lists and Tables with HTML</b></li> <li>○ <b>Frames in HTML</b></li> <li>○ <b>Forms in HTML</b></li> </ul>	
3	<b>Cascading Style Sheet CSS:</b> <ul style="list-style-type: none"> <li>• CSS</li> <li>• How CSS Work</li> <li>• CSS RULES</li> <li>• Adding CSS to an HTML Document</li> <li>• Properties of CSS</li> </ul>	6
4	<b>Introduction to JavaScript:</b> <ul style="list-style-type: none"> <li>• A Review of the most important commands in HTML and CSS languages.</li> <li>• Overview of JavaScript.</li> <li>• Advantages of JavaScript.</li> <li>• The differences between HTML, CSS, and JavaScript.</li> <li>• The difference between Java and JavaScript.</li> <li>• JavaScript Prosperities.</li> </ul> <b>Fundamentals of JavaScript:</b> <ul style="list-style-type: none"> <li>• Simple programming in JavaScript:</li> <li>• Input and output of data in JavaScript.</li> <li>• Components of the JavaScript language:</li> </ul> <b>Control statements:</b> <ul style="list-style-type: none"> <li>• Understanding the concept of control statements:</li> </ul> <b>Functions:</b> <ul style="list-style-type: none"> <li>• The concept of functions.</li> <li>• The purpose of using functions.</li> <li>• Defining and invoking functions.</li> <li>• Function types</li> <li>• Function arguments and parameters.</li> <li>• Function calls</li> <li>• Returning values from functions.</li> <li>• Variables scope:</li> <li>• Function operators.</li> <li>• Common mistakes when writing a function</li> </ul> <b>Events:</b> <ul style="list-style-type: none"> <li>• Understanding Events.</li> <li>• Definition, usage, and practical examples.</li> <li>• Event types:</li> </ul>	16



	<b>Validation of entered data and use of cookies:</b> <ul style="list-style-type: none"> <li>• Verify that no field is left blank (Required Field).</li> <li>• Control the length of the data entered in the field.</li> <li>• Matching data entered in two fields.</li> <li>• Prevent entering any data type other than the field type.</li> <li>• Examples to verify the validity of the entered data.</li> <li>• Using cookies.</li> </ul> <b>Standard libraries in JavaScript:</b> <ul style="list-style-type: none"> <li>• Objects</li> <li>• Arrays</li> <li>• Math Objects:</li> <li>• Date Objects:</li> <li>• String Objects:</li> <li>• Window Objects</li> </ul>	
5	<b>Publishing and Managing the Website</b>	4
6	<b>Building websites using application software and applying the characteristics of the languages used in the course.</b>	4
Total		48

## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm Exam	Week7	20%
2.	Quizzes	Continuous	10%
3.	Project	Week 10-11	15%
4.	Participation	Continuous	5%
5.	Practical Assessment (Lab)	Continuous	20%
6.	Final Exam	Week12	30%

\*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	<ul style="list-style-type: none"> <li>- Web Design in a Nutshell, By Jennifer Niederst, 1st Edition</li> <li>- JavaScript The Definitive Guide, By David Flanagan, 6th Edition</li> </ul>
Supportive References	<ul style="list-style-type: none"> <li>- Learning Web Design a Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics, By Jennifer Robbins, 4th Edition.</li> <li>- Building Websites All in One for Dummies, By Doug Sahlin and Claudia Snell, 2nd Edition.</li> <li>- PHP, MySQL, JavaScript, and HTML5 All in One for Dummies, By Steven Suehring and Janet Valade, 1st Edition.</li> <li>- JavaScript Bible, By Danny Goodman, Gold Edition.</li> </ul>
Electronic Materials	Course Lectures on the Blackboard
Other Learning Materials	N/A

### 2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms, laboratories
Technology equipment (projector, smart board, software)	PC and WIFI Internet access within the classroom Projector Visual Studio Code , Notepad++
Other equipment (depending on the nature of the specialty)	A software for building websites determined by course faculty

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching		
Effectiveness of students assessment		
Quality of learning resources		
The extent to which CLOs have been achieved		
Other		

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

**Assessment Methods** (Direct, Indirect)





## G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	

