

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Web Design and Programming		Module Delivery	
Module Type	<u>Core</u>		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar	
Module Code	MU010602105			
ECTS Credits	5			
SWL (hr/sem)	125			
Module Level	UGII	Semester of Delivery		3
Administering Department	Computer Science	College	College of Science	
Module Leader	Dr. Asmaa Sadiq		e-mail	<a href="mailto:asmaasadiq@uomustansiriyah.edu.iq">asmaasadiq@uomustansiriyah.edu.iq</a>
Module Leader's Acad. Title	Assistant Prof.	Module Leader's Qualification		
Module Tutor	Dr. Eman Hato		e-mail	emanhato@uomustansiriyah.edu.iq
Peer Reviewer Name	Dr. Asmaa Sadiq		e-mail	<a href="mailto:asmaasadiq@uomustansiriyah.edu.iq">asmaasadiq@uomustansiriyah.edu.iq</a>
Scientific Committee Approval Date	<u>22 / 4 / 2024</u>	Version Number	1.0	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

## Module Aims, Learning Outcomes and Indicative Contents

### أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<p><b>Module Objectives</b> أهداف المادة الدراسية</p>	<p>This subject presents the website design and programming that is essential topic to both Computer Science and Information Technology. This course focuses on fundamentals of design and coding of website using HTML. Scope of this course could summarize by: Editing and Viewing HTML Files, Setting Up the Document Structure, Formatting Text by Using Tags, Using Lists and Backgrounds, Creating Hyperlinks and Anchors, Style Sheets and Graphics, Page Layout and Navigation, Creating Tables, Formatting Tables, CSS for presentation, linking CSS to a web pages and three basic page layout strategies. JavaScript provides a way to validate form's data on the client's computer. Students are requested to design and implement professional website regarding skills of the contents of the topic.</p>
<p><b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية</p>	<p>At the end of the course, students are expected to learn:</p> <ol style="list-style-type: none"><li>1- Understanding the web design development project lifecycle.</li><li>2- Identify HTML and create a basic page with these languages.</li><li>3- Identify the types of images used in modern web design and explain what types are appropriate for different functions.</li><li>4- Designing and programming to create all required aspects of website, controlling on text, tables, hyperlinks, colors as well as using selected templates to design website. The student will write professional coding to create the above elements.</li><li>5- Identify the CSS for presentation and add interactivity to website by JavaScript.</li></ol>
<p><b>Indicative Contents</b> المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p><b>UNIT I: [ 8 hrs.]</b> <b>Understanding of web design and programming Concepts:</b> Students should gain a comprehensive understanding of the fundamental concepts of web page, web site, web operations, web browser, Uniform Resource Locator (URL) and internet protocols</p> <p><b>UNIT-II: [12 hrs.]</b> <b>Web design pages structure:</b> Web design typically follows a structured approach to create organized and efficient web pages such heading and paragraph using tags and attributes concepts. Then lists are used to group related items by using different lists</p>

	<p>types.</p> <p><b>UNIT-III:</b> [20 hrs.]  <b>Using images and Links in HTML page:</b> In this section the different types of images with different source are embedded in HTML pages. Then different links types (external, internal, directory and hyperlinking) are used to provide coherence and freedom of movement between different pages in the designing web.</p> <p><b>UNIT-IV:</b> [20 hrs.]  <b>Tables and Forms:</b> In this section the tables with rows and columns spanning are embedded in web pages. Then design a form with different elements types are used to build a web project. All concepts used in units (I, II and III) are included in forms. Also, Text, Checkbox, Password and others are included in the web site.</p> <p><b>UNIT V [20 hrs.]</b>  <b>CSS for presentation and JavaScript Language:</b> The CSS are used to make the web page more attractive and adding the CSS format for each HTML element. The JavaScript language is used to add interactivity, enhance user experience, and create dynamic web page such as providing immediate feedback, handle events efficiently, and making applications more responsive.</p>
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<b>Learning and Teaching Strategies</b> استراتيجيات التعلم والتعليم	
<b>Strategies</b>	<p><b><u>Learning Strategies:</u></b></p> <p>The best way to learn a web design programming is to practice them. You can also find books, courses, or tutorials that offer exercises and examples.</p> <ol style="list-style-type: none"> <li>1- Hands-on Practice: web design programming require a continues practice and working on building simple systems and developing them gradually contributes to the development of practical practice</li> <li>2- Continuous reading of the latest developments in the subject of website design helps in developing skills and thus increasing experience in the subject of design.</li> <li>3- Collaborative Learning by participating and collaborating with a team in building a web site project that includes a number of web pages with joining collaborative groups helps develop skills and solve problems collectively</li> </ol> <p><b><u>Teaching Strategies:</u></b></p> <ol style="list-style-type: none"> <li>1- Conceptual Explanation: start by providing a simple explanation of web</li> </ol>

	<p>design programming with simple examples of limited web pages then combines these pages into web site.</p> <p>2- Hands-on Exercises: It includes distributing students to a number of projects (two students for each project) and following up on the development of the projects with the theoretical and practical material in the course.</p> <p>3- Interactive Sessions: Conduct live sessions where students can actively participate, ask questions, and solve problems. This approach promotes engagement and practical learning.</p> <p>4- Resources and References: Share relevant web design resources, recommended textbooks, and online tutorials to supplement the curriculum and encourage further exploration.</p>
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<b>Student Workload (SWL)</b> الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	79	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	5
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	46	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	3
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	<b>125</b>		

<b>Module Evaluation</b> تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	2	10% (10)	6 and 10	LO #1, #2, #3, #4, #5
	<b>Assignments</b>	2	8% (8)	4 and 11	LO #1, #2, #3, #4, #5
	<b>Projects / Lab.</b>	1	14% (14)	Continuous	All
	<b>Report</b>	1	8% (8)		LO #1, #2, #3, #4, #5
<b>Summative assessment</b>	<b>Midterm Exam</b>	2hr	10% (10)	8	LO #1, #2, #3, #4
	<b>Final Exam</b>	4hr	50% (50)	16	All
<b>Total assessment</b>			100% (100 Marks)		

<b>Delivery Plan (Weekly Syllabus)</b> المنهاج الاسبوعي النظري	
	<b>Material Covered</b>
<b>Week 1</b>	<b>Introduction to web-design:</b> Internet Technology, the Web Concepts, Uniform Resource Locator (URL) and Internet Protocols.
<b>Week 2</b>	<b>Web Design:</b> Client-Server Architecture, Web Browsers, Web Operations, Site Structure Types of Web Sites, Website Design Issues
<b>Week 3</b>	<b>HTML Document Structure:</b> HTML Structure, HTML Tags and Attributes, HTML Headings, HTML Paragraphs, HTML Character Entities
<b>Week 4</b>	<b>HTML List:</b> Html List Advantages, List Types, Unordered Lists, Ordered Lists, Description Lists List Type Selection, Nesting Lists
<b>Week 5</b>	<b>Images in HTML:</b> Introduction to Image Types, Image Attributes, Adding Images
<b>Week 6</b>	<b>Links in HTML:</b> Linking in HTML, Relative and Absolute Path, Target attribute, External linking Internal linking, Directory Linking, Hyperlinking to other Content
<b>Week 7</b>	<b>Midterm Exam1 /</b>
<b>Week 8</b>	<b>Tables in HTML:</b> Introduction, Table Element, Adding Tables, Spanning Cells
<b>Week 9</b>	<b>Topic in Web Design Forms:</b> Form Elements Types, Forms Attributes, Form Controls, Input Element Type Attribute (Text, Checkbox, Password ...), Fieldset and Select Element, Form Design
<b>Week 10</b>	<b>CSS for Presentation:</b> Fundamental and Advantage of CSS, Types of CSS (Inline, Embedded and External CSS), Linking CSS to a Web Page, Grouped and ID Selectors
<b>Week 11</b>	<b>CSS for Presentation:</b> Formatting Text, Formatting Lists, Colors and Backgrounds, Styling Tables
<b>Week 12</b>	<b>Page Layout with CSS:</b> Page Layout Strategies, Fixed Layout, Fluid Layout, Elastic Layout, Hybrid Layout
<b>Week 13</b>	<b>Midterm Exam2 /</b>
<b>Week 14</b>	<b>JavaScript: Basic Scripting:</b> Adding JavaScript to a Page, Accessing Nodes, Event Driven
<b>Week 15</b>	<b>JavaScript: Basic Handling:</b> Form Validation, Regular Expressions, Basic Validation, Data Format Validation
<b>Week 16</b>	<b>Final exam</b>

<b>Delivery Plan (Weekly Lab. Syllabus)</b> المنهاج الاسبوعي للمختبر	
	<b>Material Covered</b>
<b>Week 1</b>	<b>Introduction to HTML:</b> to understand the student the general idea of the concept of HTML, open and save file of HTML.
<b>Week 2</b>	<b>Basic and concept of HTML markup:</b> practice the student about the structure of HTML markup, bigining, ends and main parts of HTML markup
<b>Week 3</b>	<b>HTML markup with examples:</b> Learn the students Tags and Attributes HTML Headings, Paragraphs, Character Entities
<b>Week 4</b>	<b>HTML markup with list:</b> learn and practice student all types of HTML list (order, an order, nested and description lists)
<b>Week 5</b>	<b>HTML markup with images:</b> learn student how to load image in HTML markup

Week 6	<b>HTML markup with different types of linking:</b> learn the student to use different types of links (internal, external Directory Linking and Hyperlinking) and using links with images.
Week 7	<b>Midterm Exam</b>
Week 8	<b>HTML markup with table:</b> learn the student to create table, spanning tables in row and column.
Week 9	<b>HTML markup with form:</b> learn the students to design the form with different element types, attributes and controls, Fieldset and Select Element.
Week 10	<b>Design project:</b> apply a practical project using HTML markup.
Week 11	<b>HTML markup with CSS:</b> using different types of CSS for Presentation (Inline, Embedded and External CSS), using CSS in web pages.
Week 12	<b>HTML markup with CSS (images, tables, lists and forms).</b>
Week 13	<b>HTML markup with CSS (Contextual Selector):</b> using the different page Layout (fixed, elastic and hybrid) with CSS.
Week 14	<b>Introduction to JavaScript Language:</b> Adding JavaScript to an HTML page
Week 15	<b>Project Discussion</b>

<b>Learning and Teaching Resources</b> مصادر التعلم والتدريس		
	Text	Available in the Library?
<b>Required Texts</b>	<ul style="list-style-type: none"> <li>- Learning Web Design, 4th Edition, Jennifer Niederst Robbins.</li> <li>- HTML &amp; CSS: The Complete Reference, Fifth Edition, Thomas A. Powell.</li> </ul>	
<b>Recommended Texts</b>	HTML and CSS Design and Build Websites, Jon DuCkeTT.	
<b>Websites</b>	Designing for the Web – free (Online Edition) - <a href="http://designingfortheweb.co.uk">http://designingfortheweb.co.uk</a> . W3Schools Online Web Tutorials <a href="http://www.w3school.com">http://www.w3school.com</a> .	

<b>Grading Scheme</b> مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
<b>Success Group (50 - 100)</b>	A - Excellent	امتياز	90 – 100	Outstanding Performance
	B - Very Good	جيد جدا	80 – 89	Above average with some errors
	C - Good	جيد	70 – 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 – 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 – 59	Work meets minimum criteria
<b>Fail Group (0 – 49)</b>	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

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**Note:** Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.