QF01/0408-4.0E	Course Plan for Bachelor program - Study Plan Development and Updating Procedures/ Cyber Security Department

Study plan No.	2024/2025		**University Specialization**	Cybersecurity	
Course No.	0133232		**Course name**	Web Application Programming (**1**)	
Credit Hours	3		**Prerequisite Co-requisite**	Computer Programming	
Course type	☐ Mandatory university requirement	☐ University elective requirements	☐ Faculty mandatory requirement	☐ Support course family requirements	**✓Mandatory requirements** ☐ Elective requirements
Teaching style	☐ Full online learning		☐ Blended learning		☐ **✓Traditional learning**
Teaching model	☐ 2Synchronous: 1asynchronous		☐ 2 face to face : 1synchronous		☐ **✓2 Traditional**

Faculty member and study divisions information (to be filled in each semester by the subject instructor)

Name	Academic rank	Office No.	Phone No.	E-mail	
Eman Abu Maria	Instructor	231	-	Eman.maria@zuj.edu.jo	
Division number	**Time**	**Place**	**Number of students**	**Teaching style**	**Approved model**

Brief description

This course provides the students with important components of HTML5, teaching students how to add images, hyperlinks, lists, video, audio and forms to web pages. Further, this course provides an overview of CSS3 and JavaScript, which facilitate disciplined approach to designing computer programs that enhance the functionality and appearance of Web pages.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc)	Responsive Web Design with HTML5 and CSS: Build future-proof responsive websites using the latest HTML5 and CSS techniques 5th ed. Edition (2025)			
Supportive learning resources (Books, databases, periodicals, software, applications, others)	1. Web Development: HTML, CSS and JavaScript for Beginners (**Marcel Pacheco2024**) 2. Mastering Web Development: A Journey through HTML, CSS, and JavaScript (**Martin Hander2023)** 3. Responsive Web Design with HTML5 and CSS by **Ben Frain** (2022). 4. JavaScript for Impatient Programmers by **Axel Rausch Mayer** (2022).			
Supporting websites	https://www.w3schools.com/			
The physical environment for teaching	☐ Class room	☐ **✓Labs**	☐ Virtual educational platform	☐ Others
Necessary equipment and software	Visual Studio Code App. https://code.visualstudio.com/			
Supporting people with				

special needs	
For technical support	E-learning and Open Educational Center. Computer Center

Course learning outcomes (S= *Skills, C= Competences K= Knowledge,)*

No.	Course learning outcomes	The associated program learning output code
	Knowledge	
K1	Understanding the evolution of the Internet and the World Wide Web.	**MK1**
K2	Understanding important components of HTML5 documents.	**MK2**
K3	Understanding a website's appearance with style sheets.	**MK3**
K4	Understanding and applying JavaScript programs.	**MK4**
	Skills	
S1	Knowledge of the structure and model of the Web Pages.	**S1**
S2	Knowledge the interactive Front-End Web Development.	**S2**
S3	Develop Web and Design using HTML5, CSS and JavaScript.	**S3**
	Competences	
C1	The ability to using the important components of HTML5 documents.	**C1**
C2	Applying a style sheet to give all the pages of a website the same look and feel.	**C2**
C3	Using JavaScript statements.	**C3**

Mechanisms for direct evaluation of learning outcomes

Type of assessment / learning style	Fully electronic learning	Blended learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
First exam	0	0	0	**0**
Second / midterm exam	%30	%30	%30	**%30**
Participation / practical applications	0	0	0	**0**
Asynchronous interactive activities	%30	%30	%30	**%30**
final exam	%40	%40	%40	**%40**

Note: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Schedule of simultaneous / face-to-face encounters and their topics

Week	Subject	learning style*	Reference **
1	• **Lecture (1):** HTML Introduction – Editing HTML5 – First HTML5 Example – HTML Headings – HTML Line Breaks – HTML Horizontal Rules Tag – HTML Paragraphs • **Lecture (2):** – HTML Text Formatting – HTML Images – HTML Links	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
2	• **Lecture (3):** HTML Lists – Unordered HTML Lists (UL) – Ordered HTML Lists (OL) – HTML Description Lists (DL) • **Lecture (4):** – HTML Tables Part (1)	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
3	• **Lecture (5):** HTML Tables Part (2) • **Lecture (6):** Forms	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
4	• **Lecture (7):** (Tables and Forms) Exercises • **Lecture (8):** Introduction to Cascading Style Sheets (CSS): – Introduction – External CSS – Inline Styles – Embedded (Internal) Style Sheets		HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
5	• **Lecture (9): CSS** backgrounds and colors • **Lecture (10):** CSS fonts and text properties	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
6	**Midterm Exam 30%**		
7	• **Lecture (11):** Class and ID Notations • **Lecture (12):** CSS Box Model – CSS Border – CSS Margin – CSS Padding	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.

8	• **Lecture (13):** Class and ID Notations • **Lecture (14):** HTML-Div tag	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
9	• **Lecture (15):** DIV (Exercises) • **Lecture (16):** CSS DIV-Layout-Display-Position-Float-Clear Properties	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
10	• **Lecture (17):** Introduction to Scripting • **JavaScript Lecture (18):** JavaScript (Output, Variable, Arithmetic Operators)	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
11	• **Lecture (15):** Functions • **Lecture (16):** Control Structures (Selections and Loops	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
12	• **Lecture (17):** JavaScript HTML DOM - Changing CSS **Lecture (18):** Events Examples	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
13	• **Lecture (19):** JavaScript (Exercises)	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
14	Revision	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
15	Discussing projects	Traditional Learning (Practical Learning)	HTML, CSS & JavaScript in easy steps 1st Edition by Mike McGrath 2020.
16	**Final Exam 40%**		

*** Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.**

**** Reference: Pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.**

Schedule of asynchronous interactive activities (in the case of e-learning and blended learning)

Week	Task / activity	Reference	Expected results
4	• **Tables and Forms** (Exercises)		
5	• **Project idea submission:** include the project title, a brief description, and the names of the team members.		
9	• **DIV** (Exercises)		
13	• **JavaScript** (Exercises)		
14	• **Project submission**		
15	• **Project discussion**		