1	**Course title**	Web application development 1
2	**Course number**	**1904121**
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	3
4	Prerequisites/corequisites	1904101
5	Program title	Business Information Technology
6	Program code	4
7	Awarding institution	The university of Jordan
8	Faculty	King Abdullah II School for Information Technology
9	Department	Business Information Technology Department
10	Level of course	1nd year
11	Year of study andsemester (s)	2014/2015
12	Final Qualification	Bachelor(Bsc)
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	Last update: 9/2015
16	Required/ Elective	Required

17. Course Coordinator:

Dr. Ja'far Alqatawna
KASIT 3rd floor office# 312 or office# 302
2-3:30 Sunday, Tuesday, Wednesday
j.alqatawna@ju.edu.jo

18.Other instructors:

Dr. Ali Rodan
Dr. Hossam Faris

19. Course Description:

This course aims to improve students' ability in developing web applications using Client-Side programming including XHTML, Cascading Style Sheet and JavaScript. Students will have strong knowledge about the methods and tools used in developing web applications. Students will know how the World Wide Web works to be able to design, implement and configure its services and applications effectively.

20. Course aims and outcomes:

INTENDED COURSE OUTCOMES

On successfully completing the course, the students are expected to have gained good knowledge of:

A- Knowledge and understanding: Students should

A1: Understand the fundamentals of the Internet and the World Wide Web.

A2: Understand basics of HTTP protocol.

A3: Understand web architecture and client-side programming.

B- Intellectual skills: with ability to …

B1: Use XHTML build static website with valid content.

B2: Use Cascading Style Sheets CSS to create a presentation for web content.

B3: Use JavaScript to create dynamic and real web applications.

C- Subject specific skills – with the ability to …

C1: Design and implement a fully functional client-side web application.

D- Transferable skills – with ability to

D1: Work in a group in order to implement a web-based project.

D2: Present the (project) and make a demo.

21. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Reading from textbook
Fundamentals of the Internet (i.e., history, standards, connectivity, searching, FTP, Mail and HTTP). How Web server and HTTP protocol work. Students should be able to distinguish between client-side programming and server-side programming.	1	All	A1 A2 A3	Ch1
Introduction to XHTML • Editing XHTML (plus the well-formed XHTML document requirements) • Headers • Linking • Images • Special characters and line breaks • Unordered lists • Nested and Ordered lists • Tables	2-6	All	B1	Ch4

• Forms • Meta elements				
Project – Task 1			C1 D1 D2	
Cascading Style Sheets (CSS) • Inline Styles • Embedded Style Sheets • Conflicting Styles • Linking External Style Sheets • Positioning Elements • Backgrounds • Element Dimensions • Text Flow and the Box Model		All	B2	Ch5
Project – Task 2			C1 D1 D2	
JavaScript: • Introduction to Scripting (textbook Ch6) • Obtaining User Input with prompt Dialogs • Memory concepts • Arithmetic • Decision making: Equality and Relational Operators	7-10		B3	Ch6
JavaScript: Control Statements I • Algorithms • Pseudocode • Control Statements • if Selection Statement • if … else Selection Statement • while Repetition Statement • Counter-Controlled Repetition • Sentinel-Controlled Repetition • Nested Control Structures • Assignment Operator • Increment and Decrement Operators	11		B3	Ch7
JavaScript: Control Statements II • Essentials of Counter-Controlled Repetition • for Repetition Statement • switch Multiple-Selection Statement • do … while repetition statement • break and continue statements • Labelled break and continue statements • Logical Operators	12	All	B3	Ch8

JavaScript: Functions • Program Modules in JavaScript • Programmer-Defined Functions • Function Definitions • Scope Rules • Global functions • Random-Number Generation • Processing Forms with JavaScript Function (see uploaded examples).	13	All	B3	Ch9
JavaScript: Objects • Thinking About Objects • Math Object • String Object • Date Object • document Object • window Object	14		B3	Ch10
One Dimensional Arrays • Declaring, Allocating, Processing and Passing one dimensional Array to function	14		B3	Ch11
Project – Task 3			C1 D1 D2	

22. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Lecture, lab and presentation

23. Evaluation Methods and Course Requirements:

24. Course Policies:

A- Attendance policies:

Maximum allowable absence 15% of number of Lectures/Semester

B- Absences from exams and handing in assignments on time:

It is the student's responsibility to ensure that he/she is aware of all assignments, announcements and contents of missed sessions

25. Required equipment:

1- Personal computers in a lab.

2- Data show

3- text editor and web browser

26. References:

Textbook

Internet & World Wide Web- How to Program, 4th Edition, P.J. Deitel, H. M. Deitel, Prentice Hall, 2008

Recommended **Web Sites:**

www.w3schools.com