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

Study plan No.	**2021/2022**		**University Specialization**		**Software Engineering**	
Course No.	**0114455**		**Course name**		**Software development and documentation**	
Credit Hours	**3**		**Prerequisite Co-requisite**		**Systems Analysis and Design**	
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**		√ **3 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	
Mohammad Muhairat	**Associate Professor**	**340**	----------	**drmohairat@zuj.edu.jo**	
Division number	**Time**	**Place**	**Number of students**	**Teaching style**	**Approved model**
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Brief description

This course introduces students to programming technologies, design and development related to Web applications. Topics include, Introduction to oracle ADF, ADF Faces Rich Client Lifecycle, Working with Oracle ADF Task Flows, Page Navigation, Working with GUI Components, Working with security, etc…. Upon completion, students should be able to create basic Web application.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc)	Oracle Fusion Developer Guide: Building Rich Internet Applications with Oracle ADF Business Components and Oracle ADF Faces, Frank Nimphius and Lynn Munsinger,2019, McGraw-Hill Education.			
Supportive learning resources (Books, databases, periodicals, software, applications, others)	1. https://docs.oracle.com/middleware/1212/adf/docs.htm 2. Oracle ADF Survival Guide: Mastering the Application Development Framework, Apress; 1st ed. edition (September 4, 2017).			
Supporting websites	https://www.oracle.com/application-development/technologies/jdeveloper.html			
The physical environment for teaching	☐ Class room	√ labs	☐ Virtual educational platform	☐ Others
Necessary equipment and software	JDeveloper, Oracle XE 11g / MySql Server			
Supporting people with special needs	--------			
For technical support	--------			

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

No.	Course learning outcomes	The associated program learning output code
	Knowledge	
K1	The knowledge of software development fundamentals, including data structures, algorithms, complexity, multiple programming languages, paradigms, and technologies.	MK4
	Skills	
S1	An ability to use the techniques, skills, and modern tools necessary for software engineering practice.	MS3
	Competences	
C1	Ability to develop software systems in one or more significant application domains.	MC2

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)
Midterm exam	30%	30%	**40%**	30%
Participation / practical applications	0	0	**10%**	30%
Asynchronous interactive activities	30%	30%	**0**	0
Final exam	40%	40%	**50%**	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	The Quick Learner's Guide to Oracle Fusion Web Application Development	Lecture/ learning through projects	1-44
2	Oracle Application Development Framework (ADF)	Lecture/ learning through projects	45-62
3	The Oracle ADF and ADF Faces Rich Client Lifecycle	Lecture/ learning through projects	63-102
4	Introduction to Oracle ADF Task Flows	Lecture/ learning through projects	103-139
5	Working with Unbounded and Bounded Oracle ADF Task Flows	Lecture/ learning through projects	141-190
6	Working with Bounded Task Flows in ADF Regions	Lecture/ learning through projects	191-247

7	Page Navigation in Oracle ADF	Lecture/ learning through projects	249-264
8	Working with Input Components	Lecture/ learning through projects	265-278
9	Working with Table, Tree, and TreeTable Components	Lecture/ learning through projects	279-343
10	Working with Menus, Dialogs, and Pop-ups	Lecture/ learning through projects	345-366
11	Looking Up Data	Lecture/ learning through projects	369-395
12	Working with Images and Media	Lecture/ learning through projects	397-411
13	Visualizing Data with DVT Components	Lecture/ learning through projects	413-434
14	Building Custom Look and Feel with Cascading Style Sheets and Skinning	Lecture/ learning through projects	509-535
15	Oracle Fusion Web Application Security	Lecture/ learning through projects	655-721
16	Final Exam		

*** 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
1			
2			
3			
4			
5			
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15			
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