Science & IT
Faculty of Science & IT

جامعــة الزيتونــة الأردنيــة
Al-Zaytoonah University of Jordan
كلية العلوم وتكنولوجيا المعلومات
Faculty of Science and IT

سمــات- وجــودة
"Tradition and Quality"

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

Study plan No.	2021/2022	University Specialization		Software Engineering	
Course No.	0104713	Course name		Advanced Software Development	
Credit Hours	3	Prerequisite Co-requisite		-----------------	
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	-----------------------	----------------------	drmohairat@zuj.edu.jo

Division number	Time	Place	Number of students	Teaching style	Division number
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Brief description

Successfully design rich enterprise web applications using the detailed information in this Oracle Press volume. Oracle Fusion Developer Guide goes beyond the predominant drag-and-drop methods in Oracle JDeveloper and provides a wealth of examples that address common development scenarios when using Oracle Fusion Middleware. Work with Oracle JDeveloper, define navigation rules, accept and validate user input, build page layouts and skins, and incorporate drag-and-drop functionality into web applications. This authoritative resource also explains how to secure and internationalize your applications.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc)	1. Oracle Fusion Developer Guide: Building Rich Internet Applications with Oracle ADF Business Components and Oracle ADF Faces McGraw-Hill Education; 3rd edition (November 14, 2019)
Supportive learning resources (Books, databases, periodicals, software, applications, others)	2. Oracle ADF Enterprise Application Development – Made Simple: Packt Publishing; 2nd edition (February 19, 2014). 3. Oracle ADF Survival Guide: Mastering the Application Development Framework 1st ed. Edition, Apress; 1st ed. edition (September 4, 2017)
Supporting websites	
The physical environment for teaching	√ Class room / √ labs / ☐ Virtual educational platform / ☐ Others
Necessary equipment and software	CASE TOOLS
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 engineering principles, including a thorough understanding of software analysis and design, evaluation and testing and software quality and correctness.	MK1
K2	Understanding of software engineering processes, including management of complex software development projects.	MK2
Skills		
S1	An ability to analyze, design, verify, validate, implement, apply, maintain, and manage the development of software systems to meet desired needs within realistic constraints.	MS1
S2	An ability to identify, formulates, and solve software engineering problems.	MS2
S3	An ability to use the techniques, skills, and modern tools necessary for software engineering practice.	MS3
Competences		
C1	An ability to function on multidisciplinary teams to communicate effectively.	MC1
C2	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)
First exam	0	0	%20	0
Second / midterm exam	%30	%30	%20	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, learning through problem solving	Chapter 1
2	Oracle Application Development Framework (ADF)	Lecture, learning through projects, learning through problem solving	Chapter 2
3	The Oracle ADF and ADF Faces Rich Client Lifecycle	Lecture, learning through projects, learning through problem solving	Chapter 3
4	Introduction to Oracle ADF Task Flows	Lecture, learning through projects, learning through	Chapter 4

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		problem solving	
5	Working with Unbounded and Bounded Oracle ADF Task Flows	Lecture, learning through projects, learning through problem solving	Chapter 5
6	Working with Bounded Task Flows in ADF Regions	Lecture, learning through projects, learning through problem solving	Chapter 6
7	Page Navigation in Oracle ADF	Lecture, learning through projects, learning through problem solving	Chapter 7
8	Working with Input Components	Lecture, learning through projects, learning through problem solving	Chapter 8
9	Working with Table, Tree, and TreeTable, Menus, Dialogs, and Pop-ups	Lecture, learning through projects, learning through problem solving	Chapter 9, 10
10	Looking Up Data and working with Images and Media	Lecture, learning through projects, learning through problem solving	Chapter 11, 12
11	Visualizing Data with DVT Components and Implementing Drag-and- Drop Functionality	Lecture, learning through projects, learning through problem solving	Chapter 13, 14
12	Working with Oracle ADF Reusable Components	Lecture, learning through projects, learning through problem solving	Chapter 15
13	Building Layouts in ADF Faces RC	Lecture, learning through projects, learning through problem solving	Chapter 16
14	Case Study (Project 1)	Lecture, learning through projects, learning through problem solving	----
15	Case Study (Project 2)	Lecture, learning through projects, learning through problem solving	----
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			
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14			

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15			
16			