جامعة الزيتونــة الأردنيــة
Al-Zaytoonah University of Jordan
كلية العلوم وتكنولوجيا المعلومات
Faculty of Science and Information Technology

" عراقة وجودة"
"Tradition and Quality"

Detailed Course Description - Course Plan Development and Updating Procedures/ Computer Science Department	QF01/0408-3.0E

Faculty	Faculty of Science and Information Technology	Department	Computer Science
Course number	**0112325**	Course title	Programming Database Systems
Number of credit hours	3	Pre-requisite/co-requisite	Database(1)

Brief course description:

This course provides a comprehensive guide for developing database applications using the oracle 10g and the developer 10g application development utilities. The course emphasizes on SQL; creating PL/SQL programs using both SQL*Plus and forms builder ; using developer 10g forms builder and reports builder to create an integrated database application; custom forms.

	Course goals and learning outcomes
Goal 1	The ability to analyze, design, and build effective and reliable software
Learning outcomes	1.1 The student should use databases and employ them to create various computer applications 1.2 The student should use, apply, and implement SQL
Goal 2	Ability to use Oracle 10g and Developer 10g utilities
Learning outcomes	2.1 To create applications using (PL/SQL) 2.2 The student should use Forms Builder in creating database applications 2.3 The student should use Report Builder in creating database applications 2.4 The student should design custom forms
Textbook	1. **Oracle PL/SQL by Example**, 5th edition, Prentice Hall, 2015, by Benjamin Rosenzweig, Elena Rakhimov. **ISBN-13: 978-0133796780, ISBN-10: 0133796787**
Supplementary references	1. **Guide to Oracle 10g,** 5th edition, Course Technology, 2006, by Joline Morrison, Mike Morrison, Rocky Conard. **ISBN-13: 978-0-619-21629-0, ISBN-10: 0-619-21629-8** 2. **Oracle PL/SQL Programming**, 6th edition, O'Reilly Media, 2014, by Steven Feuerstein, Bill Pribyl. **ISBN-13: 978-1449324452, ISBN-10: 1449324452** 3. **Murach's Oracle SQL and PL/SQL for Developers**, 2nd edition, Mike Murach & Associates, 2014, by Joel Murach. **ISBN-13: 978-1890774806, ISBN-10: 1890774804** 4. **Oracle Database 12c PL/SQL Programming**, 1st edition, McGraw-Hill Education, 2014, by Michael McLaughlin. **ISBN-13: 978-0071812436, ISBN-10: 0071812431**

	Course timeline			
Week	**Number of hours**	**Course topics**	**Pages (textbook)**	**Notes**
01	1 1	**SQL.** DDL Commands, Database objects. Create, Alter, Drop, Rename	**31-74**	**Ref 1**

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		1	DML: insert, delete, update		
02		1	Data Control Language	77-99	Ref 1
		1	Commit ,Rollback		
		1	Oracle data dictionary		
03		1	Retrieve database using Select	101-149	Ref 1
		1	Where, Group function, having, join		
		1	Set operator, sub queries	191-203	
04		1	**Functions**. Character functions	151-188	Ref 1
		1	Numeric functions		
		1	Date Functions		
05		1	**PL/SQL.** Basics of PL/SQL	337-353	Ref 1
		1	Declaring variables and assigning values.		
		1	IF then else Structures		
06		1	Cursors	354-379	Ref 1
		1	Loops		
		1			
07		1	**First Exam 20%**	381-414	
		1	Exception handling		
		1	Stored procedure and function		
			Packages		
08		1	**Forms Builder.** Oracle forms Developer.	9-18	Ref 1
		1	Forms Compiler and Forms runtime		
		1	Query builder		
09		1	Oracle Forms Developer, Master-Details	46-70	Ref 1
		1	Object navigator, Layout editors tools		
		1	Property palette		
10		1	Writing code with Developer.	118-140	Ref 1
		1	Procedure Builder and PL/SQL.		
		1	Triggers		
11		1	Using Graphical elements in Forms.	156- 167	Ref 1
		1	The form runtime environments		
		1	Creating a form manually.		
12		1	List items, check box, radio buttons	167-184	Ref 1
		1	LOVs, Canvases.		
		1			
13		1	**Second Exam 20%**	240-256	Ref 1
		1	Developer Application design. Application interface.		
		1	Database object to create.		
			Creating the Database schema.		
14		1	Menu Editors	162-183	Ref 1
		1	Library editor		
		1	Using Property palette		

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15	1 1 1	**Reports Builder**. Tabular reports, Form like report. Group left and group above report, Matrix report Report views	**188-212**	**Ref 1**
16	1 1 1	**Projects Discussion & Final Exam 50%**		

Theoretical course evaluation methods and weight	Participation = 10% First exam 20% Second exam 20% Final exam 50%	**Practical (clinical) course evaluation methods**	Semester students' work = 50% (Reports, research, quizzes, etc.) Final exam = 50%

Approved by head of department		Date of approval	

Extra information (to be updated every semester by corresponding faculty member)

Name of teacher	Fadel "Moh'd Kamel" Altamimi	Office Number	
Phone number (extension)		Email	dr.fadel@zuj.edu.jo
Office hours			