	Hashemite University Prince Al-Hussein bin Abdullah II Faculty for Information Technology Department of Computer Information Systems	

Course Syllabus

Year: 2020-2021 **Semester: (1)**

Course No.	Course Title	Designation	Prerequisite	Co-requisite	Credit Hours .Lectures /Lab
151002241	Introduction to database systems Lab	Required	151002240 concurrent	-	1 / 0

Instructor Name	E-mail	Office No.	Office ext.	Office Hours
Randa Obeidallah	Randa.ali@hu.edu.jo	3rd floor 4	4628	Sun, Tue, Thu (10-11)
Hasan Al Da'jah	hidhaim@hu.edu.jo	3rd floor 7	-	TBA

Coordinator's Name:	Hasan Idhaim

Course Description	This course is a complement to the introduction to the database systems course. It aims to provide the students by a complete set of skills required to develop database systems using the ORACLE programming language which includes programming in the PL/SQL environment and writing programs using SQL. In addition, it includes exercises and practical applications which better suits the subjects covered in the introduction to the database systems course

a) **Textbook(s):**
1. Elmasri R. and Navanthe S. B., "Fundamentals of Database Systems", 6th edition, Addison Wesley.
b) Additional References:
1. Recommended references/worksheets will be advertised in lectures and on Moodle during the semester
2. Alice Rischert, "Oracle SQL by Example" / 4th edition

Course Learning Outcomes CLOs
1. **Demonstrate** the use of Oracle SQL command editor.(2)
2. **Illustrate** Data Definition Language (DDL) and Manipulation Language (DML) clauses. (2)
3. **Define** Integrity Constraints (Check, Foreign Key, Column, and Table Constraints), Aggregate (group), Functions, nested query and Views. (2,3,5)
4. Explain the **use** of PL/SQL programming and procedures. (2,3,5)
Addressed Student Learning Outcomes (SLOs)
2,3 and 5

Topic Details	**CLO number**	**Reference**	**No. of Weeks**	**Contact *hours**
1. Introduction to ORACLE SQL commands	1	Explained in Class	1	2
2. Data Definition Language DDL(Create, alter, and drop schema objects)	2	Ch 4/ Worksheet	2	4
3. Data Manipulation Language DML(Insert, update, and select)	2	Ch 4/ Worksheet	2	4
4. SQL UNION, JOIN, and nested query	3	Ch 4 and Ch5 /Worksheet	2	4
5. Aggregate(group) , Functions(count, max, min, sum, and etc…functions)	3	Ch 5/ Worksheet	3	6
6. Integrity Constraints(Check, Foreign Key, Column, and Table Constraints)	3	Ch 5/ Worksheet	2	4
7. Programming in PL/SQL(Block and Cursor)	4	Worksheet	2	4
Total			**14**	**28**

Assessment method	**Grade**	**Comments**
Mid-term Exam	40%	Covers topics 1,2, 3,4 and 5
Projects / Quizzes	20%	TBA
Final Exam	40%	Covers all topics
Total	100%	