هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Database 2**
Course Code:	**IS1254**
Program:	**Computer Information Systems**
Department:	**Computer Information Systems**
College:	**College of Computer Science and Information Technology**
Institution:	**Al-Baha University**
Version:	**T104 – V2**
Last Revision Date:	**25 May 2023**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3 Credit Hours (2, 2, 0) (Lecture, Lab, Tutorial) (4 Contact Hours)				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	**6th Level/2nd year**				
4. Course general Description **Lecture:** The objective of this course is to introduce the management of complex objects (Views, sequence, index and synonymes ..) and the procedural language designed specifically to embrace SQL statements within its syntax named PL/SQL. It offers an extensive feature of error checking and varieties of data types. It is block-structured programming that provides support to functions and procedures. **LAB** The lab is planned to give students practical experiments on Oracle RDBMS, how to manage complex object and how to create block, functions, procedures, trigger and exceptions.					
5. Pre-requirements for this course (if any): IS1004. Database 1.					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The objectives of this course are: - Manipulate complex objects like Views, sequence, index and synonyms - Learn the structure of PL/SQL blocks. - Apply loop control structures and conditional statement control structures. - Create cursors, procedures and functions. - Use of exceptions and triggers					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	20	50%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		
5.	Others	20	50%

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	20
2.	Laboratory/Studio	20
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	40

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Recognize complex objects like Views, sequence, index and synonyms	K1	• Lectures	***Direct Assessment Tool*** • Midterm Exam • Final Exam ***Indirect Assessment Tool*** Course Exit Survey
1.2	Describe the main concepts of PL/SQL program.	K2	• Lectures	***Direct Assessment Tool*** • Midterm Exam • Final exam ***Indirect Assessment Tool*** Course Exit Survey
2.0	Skills			
2.1	Manipulate complex objects like Views, sequence, index and synonyms	S2	• Lectures • Assignments Lab	***Direct Assessment Tool*** • Homework • Lab Work ***Indirect Assessment Tool*** Course Exit Survey
2.2	Understand of PL/SQL structure for database programming.	S2	• Lectures • Assignments Lab	***Direct Assessment Tool*** • Midterm Exam • Project • Lab Work • HomeWork • Final Exam ***Indirect Assessment Tool*** Course Exit Survey
2.3	Write the functions, procedures, Packages, Exceptions, and triggers.	S2	• Lectures • Assignments Lab	***Direct Assessment Tool*** • Midterm Exam • Project • Lab Work • HomeWork • Final Exam ***Indirect Assessment Tool*** Course Exit Survey
3.0	Values, autonomy, and responsibility			

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.1	Express self-efficacy through a willingness to problems, learn and take challenges independently.	V1	• Teamwork (Small group)	***Direct Assessment Tool*** • Project Presentation ***Indirect Assessment Tool*** Course Exit Survey

C. Course Content

No	List of Topics (Lecture)	Contact Hours
1.	Complex objects (Views, sequence, index and synonyms)	3
2.	PL/SQL Block Structure and Declaration of Variables	2
3.	Program Structures to Control Execution Flow	3
4.	Cursors and Parameters	2
5.	Functions , procedures and packages	4
6.	Exceptions	3
7.	Trigger	3
Total		20

No	Lab Topics	Contact Hours
1	Create Views, sequence, index and synonyms	2
2	Constants and Literals in PL/SQL, Program Segment PL/SQL General Concept, Variables	2
3	Condition instructions in PL/SQL – if else, switch	2
4	Practicing loop in PL/SQL – exit, while	2
5	Practicing loop in PL/SQL – for, continue, loop label	2
6	Practicing cursor	2
7	Managing procedures, functions and Packages	4
8	Exception Handling	2
9	Triggers	2
Total		20

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Homework	Every two weeks	10%
2.	Lab Work	11	10%
3.	Midterm Exam	6	20%
4.	Final Lab Exam (Project)	10	20%
5.	Final Exam	12	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	*"Database Management Systems"*. Publisher: McGraw-Hill. Author: Raghu-Ramakrishnan, Johannes ISBN: 978-1-78756-696-5, eISBN: 978-1-78756-695-8 Publication date: 3 October 2018.
Supportive References	
Electronic Materials	• Access to the Saudi Digital Library (SDL). • Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/).
Other Learning Materials	Open access course material online

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	• A class room size is provided with 20-25 seats which are more enough to accommodate registered students • A laboratory with computers that have installed Windows, for at least 25 students.
Technology equipment (projector, smart board, software)	• A digital image projection system with connection to desktop computer and laptop computer. • High speed Internet connection. • An instructor computer station • Power outlets for student's laptop plug-in • Oracle Database Express Edition (11*g* Release 2)
Other equipment (depending on the nature of the specialty)	A laboratory with multiple computers, with a variety of operating systems:

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	•Students •Faculty •Peer Reviewers •Program Leader •Course Coordinator	•Surveys (indirect). •Direct feedback from students. •Course evaluation by Peer Reviewers (indirect).

Assessment Areas/Issues	Assessor	Assessment Methods
		•Class visit by Program Leader (indirect) Comprehensive Course report (where we can find information about teaching difficulties and action plan, …)
Effectiveness of students assessment	•Faculty •Peer Reviewers	•Surveys (indirect)
Quality of learning resources	•Students •Faculty •Peer Reviewers •Course Coordinator	•Surveys (indirect) •Course evaluation by Peer Reviewers (indirect). Comprehensive Course report (where we can find information about difficulties and challenges about learning resources as well as consequences and action plan, …)
The extent to which CLOs have been achieved	•Faculty •Program Leader •Course Coordinator	•Student Results (direct) •Comprehensive Course report (where we can find the CLO assessment results)
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Curriculum Committee Meeting
REFERENCE NO.	
DATE	April 04, 2023