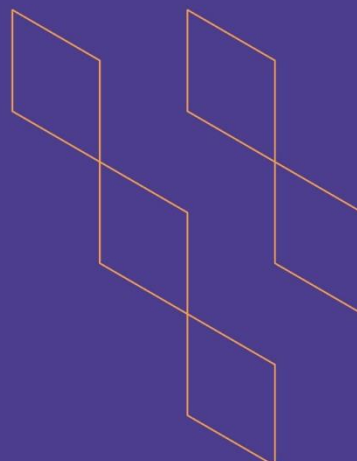




T-104  
2022

## Course Specification



Course Title: <b>Structured Query Language 2</b>
Course Code: <b>292CIS-3</b>
Program: <b>Programming and Database</b>
Department: <b>Computer department</b>
College: <b>Applied college</b>
Institution: <b>Najran university</b>
Version: <b>T -104 2022</b>
Last Revision Date: <b>20 August 2023</b>



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## A. General information about the course:

### Course Identification

1. Credit hours: 3(2+1)

#### 2. Course type

a. University  College  Department  Track  Others

b. Required  Elective

#### 3. Level/year at which this course is offered:

4<sup>th</sup> Level

#### 4. Course general Description

This course is about database SQL. It includes Using SET Operators, Managing Tables using DML statements, Managing Indexes Synonyms and Sequences, Use DDL to manage tables and their relationships, Managing Views, Controlling User Access Managing Objects with Data Dictionary Views, Managing Data in Different Time Zones. This course is essential for obtaining the professional certificate Oracle Database SQL Certified Associate (Oracle Database SQL, Exam Number: 1Z0-071), and updated periodically according to the certificate exam..

#### 5. Pre-requirements for this course (if any):

291CIS-3

#### 6. Co- requirements for this course (if any):

None

#### 7. Course Main Objective(s)

This course is intended to

- Provide students with a good understanding of concepts and terminology related to the SQL.
- Develop the programming skills and experience needed to write programs with SQL.
- Enable students to communicate with others effectively to solve real computing Problems.

### 1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	4 hours per week	90%
2.	E-learning		0%
3.	Hybrid <ul style="list-style-type: none"> <li>• Traditional classroom</li> <li>• E-learning</li> </ul>		
4.	Distance learning		100%



## 2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	30
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	<b>Total</b>	<b>60</b>

## 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	Define the concepts related to the SQL	K1	Lecturers Labs	Exam Quiz Assignment
1.2	Describe the process of writing SQL programs	K2	Lecturers Labs	Exam Quiz Assignment
1.3	Describe the difference between all SQL commands	K3	Lecturers Labs	Exam Quiz Assignment
2.0	Skills			
2.1	Analysis (SQL) programs	S2	Lecturers Labs	Exam Quiz Assignment
2.2	Develop SQL programs.	S1	Lecturers Labs	Exam Presentation
...				
3.0	Values, autonomy, and responsibility			
3.1	Demonstrate projects and assignments in teamwork for designing and developing SQL programs	V3	Project Small group report	Presentation
3.2				
...				

## C. Course Content

No	List of Topics	Contact Hours
1	<b>Using SET Operators</b> <ul style="list-style-type: none"> <li>Matching the SELECT statements</li> <li>Using the ORDER BY clause in set operations</li> <li>Using The INTERSECT operator</li> <li>Using The MINUS operator</li> <li>Using The UNION and UNION ALL operators</li> </ul>	9
2	<b>Managing Tables using DML statements</b> <ul style="list-style-type: none"> <li>Managing Database Transactions</li> <li>Controlling transactions</li> <li>Perform Insert, Update and Delete operations</li> <li>Performing multi table Inserts</li> <li>Performing Merge statements</li> </ul>	10
3	<b>Managing Indexes Synonyms and Sequences</b> <ul style="list-style-type: none"> <li>Managing Indexes</li> <li>Managing Synonyms</li> <li>Managing Sequences</li> </ul>	6
4	<b>Use DDL to manage tables and their relationships</b> <ul style="list-style-type: none"> <li>Describing and Working with Tables</li> <li>Describing and Working with Columns and Data Types</li> <li>Creating tables</li> <li>Dropping columns and setting column UNUSED</li> <li>Truncating tables</li> <li>Creating and using Temporary Tables</li> <li>Creating and using external tables</li> <li>Managing Constraints</li> </ul>	10
5	Mid Term Exam	1
6	<b>Managing Views</b>	3
7	<b>Controlling User Access</b> <ul style="list-style-type: none"> <li>Differentiating system privileges from object privileges</li> <li>Granting privileges on tables</li> <li>Distinguishing between granting privileges and roles</li> </ul>	6
8	<b>Managing Objects with Data Dictionary Views</b>	3
9	<b>Managing Data in Different Time Zones</b> <ul style="list-style-type: none"> <li>Working with CURRENT_DATE, CURRENT_TIMESTAMP, and LOCALTIMESTAMP</li> <li>Working with INTERVAL data types</li> </ul>	6
9	<b>Training on Exam Number: 1Z0-071</b>	6
		60





## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm exam	8	20%
2.	Homework's	From 4 to 11	10%
3.	Practical exam	١٥	20%
4	Final exam	١٧	50%

\*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	Steve O’Hean, Oracle Database SQL Exam Guide (Exam 1Z0-071), ISBN: 978-1-25-958461-9, 2017
Supportive References	Course at Udemy: Oracle Database 12c SQL Certified Associate 1Z0-071. <a href="https://www.udemy.com/course/oracle-database-12c-sql-certified-associate-1z0-071/">https://www.udemy.com/course/oracle-database-12c-sql-certified-associate-1z0-071/</a>
Electronic Materials	Learn and share SQL <a href="https://livesql.oracle.com/apex/f?p=590:1000:0">https://livesql.oracle.com/apex/f?p=590:1000:0</a>
Other Learning Materials	

### 2. Required Facilities and equipment

Items	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom with a suitable size for students
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Whiteboard/projector
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None



## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Student	Direct: Questioners
Effectiveness of students assessment	Teacher Audit and review committees	Direct: CW & HW Exercises and short quizzes Projects Mid and final paper exams.
Quality of learning resources	Teachers and course description committees	Indirect: Benchmarking Self-evaluation External evaluation
The extent to which CLOs have been achieved	Teacher	Direct: Measuring the learning outcomes
Other		

**Assessor** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)

## G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	