Course Specification
(Bachelor)

Course Title:	Database Basics
Course Code:	279 CIS- 3
Program	**Technical support**
Department	**Computer Department**
College:	**Applied College**
Institution	:Najran University
Version	: 3
Last Revision Date:	1-10-2024

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: (3 hours)					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (4th semester Second year)					
4. Course General Description:					
This course covers the principles of database architecture, models, languages, functions, and components; it also gives an introduction to database management systems architecture and environment. Practically the course cover Access language components, structure, and models.					
5. Pre-requirements for this course (if any):					
NO					
6. Co-requisites for this course (if any):					
NO					
7. Course Main Objective(s):					
By the end of this course students will cover model theoretically and practically an overview of DB architectures including the relational, hierarchical, network and object based data.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	3 hours per week	100%
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		

No	Mode of Instruction	Contact Hours	Percentage
4	Distance learning		

3. 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)**	
Total		60

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

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Define the basic concepts of database management systems (DBMS)	K1	• Lectures, • Brainstorming, • Class • Discussion Lab Reports	• Class work • assignments • Quizzes • Midterm Exams Final Exam
1.2	Describe the component of database management system (DBMS)	K2	Lecture Individual and group discussions	Exams •Assignments
...	Using Access to design, viewing and reporting database.	K3	Lecture Individual and group discussions	Exams •Assignments
2.0	**Skills**			
2.1	Develop and designing relational DB system using Access	S1	• Lecture • Brainstorming • Small Group Work • Lab Demonstration • Project	• Exam • Group Reports • Lab Reports

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
2.2	Explain the database management system (DBMS) architecture.	S2	• Lecture • Brainstorming • Small Group Work • Lab Demonstration • Project	• Exam • Group Reports • Lab Reports
...	Built database application using Access.	S2	• Lecture • Brainstorming • Small Group Work • Lab Demonstration • Project	• Exam • Group Reports • Lab Reports
3.0	**Values, autonomy, and responsibility**			
3.1	Demonstrate projects and assignments in the work team to design and develop areas of technical support	V1	• Lecture • Brainstorming • Small Group Work • Lab Demonstration • Project	• Exam • Group Reports • Lab Reports
3.2				
...				

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Database Concepts	4
2.	Database Architecture Lab: Introduction to access environment	6
3.	Database Planning, Design, and Administration Lab: Creating Access Tables. Creating new tables, changing a table design, setting the primary key and manipulating Tables	6
4.	Fact-Finding Techniques Lab: Table Relationship , Integrity Rules and keys	6
5.	Entity-Relationship Modeling	4

	Lab: Selecting Data with Quires. Creating Query , Changing the Sort Order and Adding Fields	
6.	Entity-Relationship Modeling Case Studies Lab: Creating Basic Access Form	6
7.	Normalization Lab: Working with Data on Access Forms	6
8.	Midterm Exam	
9.	Data Manipulation Languages Lab: Creating Basic Access reports	4
10.	SQL Quires: Insert, Delete, Select, Update, Where, Order by Lab: SQL DDL and MSL statement	6
11.	SQL Quires with Joins Types of joins, Sub queries Lab: SQL DCL statements	6
12	Indexing: Types of SQL indexing Lab: SQL Constrain	6
Total		**60**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	First Monthly Exam	8	20%
2.	Year duties	continuously	10%
3.	Practical exam	15	20%
4.	Final exam	18	50%
5.			

*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	Abraham Silberschatz, Henry Korth, Database System Concepts 6th Edition, McGraw-Hill (2011), ISBN 978-0-07-352332-3
Supportive References	
Electronic Materials	http://lms.nu.edu.sa/webapps/portal/frameset.jsp المكـتبة الرقمية

	http://lib.nu.edu.sa/DigitalLibbrary.aspx
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Lecture rooms should be large enough to accommodate the number of registered students
Technology equipment (projector, smart board, software)	Black Board/Data Show
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	***Student***	***Questioners***
Effectiveness of Students assessment	Staff committee	Cross checking
Quality of learning resources	Faculty Administration	Review and check the results
The extent to which CLOs have been achieved	Quality management in the department	A review of the measurement of learning outcomes
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	