هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Database Administration**
Course Code:	**IS1752**
Program:	**Computer Information Systems**
Department:	**Computer Information Systems**
College:	**Computer Science & Information Technology**
Institution:	**Al-Baha University**
Version:	**T-104** V2
Last Revision Date:	**25 May 2023**

Table of Contents:

A. General information about the course:

Course Identification					
1. **Credit hours:**	3 Credit Hours (3, 0, 0) (Lecture, Lab, Tutorial) (3 Contact Hours)				
2. **Course type**					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. **Level/year at which this course is offered:**	10th level/ 4th Year				
4. **Course general Description** Database administration refers to the whole set of activates performed by a database administrator to ensure that a database is always available as needed. This course prepares the student to be an IS professional who can develop, deploy, manage and integrate data and database to support the organization. It includes the backup/restore and tuning as well. To be able to gain suitable expertise in maintenance of a database its availability and to ensure security controls are adequate and are functioning as intended within the operating system.					
5. **Pre-requirements for this course (if any):** IS1254-Database 2					
6. **Co- requirements for this course (if any):**					
7. **Course Main Objective(s)** The main purpose for this course is to teach students how to describe the basics of database administration & Database Environment, manage performances such as: system performance, database performance, applications performance, Manage DB monitoring and tuning, practice the Backup and Recovery, security, connectivity.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	30	100%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	
3.	Field	

4.	Tutorial	
5.	Others (specify)	
	Total	30

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	Describe the basics of database administration & Database Environment	K1	• Lectures	***Direct Assessment Tool*** • Midterm Exam • Final Exam ***Indirect Assessment Tool*** Course Exit Survey
1.2	Understand the task of database administrator	K3	• Lectures	***Direct Assessment Tool*** • Midterm Exam • Quiz • Final Exam ***Indirect Assessment Tool*** Course Exit Survey
1.3	Explain Performance Management and System Performance	K3	• Lectures	***Direct Assessment Tool*** • Midterm Exam • Final Exam ***Indirect Assessment Tool*** Course Exit Survey
2.0	Skills			
2.1	Manage Database Performance, Application Performance, Data Integration and Security	S2	• Lectures • Assignment	***Direct Assessment Tool*** • Homework • Quiz ***Indirect Assessment Tool*** Course Exit Survey
2.2	Manage Backup, Recovery ,Database Connectivity and tuning	S2	• Lectures • Assignment	***Direct Assessment Tool*** • HomeWork • Final Exam ***Indirect Assessment Tool*** Course Exit Survey
2.3	Practice on covered topics and communicate in groups collaboratively	S6	• Lectures • Assignment	***Direct Assessment Tool*** • Homework ***Indirect Assessment Tool*** Course Exit Survey
3.0	Values, autonomy, and responsibility			
3.1	Work both independently and collaboratively	V1	• Teamwork (Small group)	***Direct Assessment Tool*** • HomeWork ***Indirect Assessment Tool*** Course Exit Survey

C. Course Content

No	List of Topics	Contact Hours
1	Introduce Concept of Database Administration	4
2	Database environment (configuration and tuning)	4
3	Database Change Management and Performance Management	5
4	Database Performance & Application Performance	5
5	Backup and Recovery Overview	4
6	Data integration and security	4
7	Database connectivity	4
Total		30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm	Week 6	20%
2.	Assignment	Periodically	10%
3.	Quiz	Week 9	10%
3.	Final Exam	Week 12	60%

*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	1- Oracle Database 12c DBA Handbook PUBLISHED BY:McGraw Hill Computing PUBLICATION DATE:July 2015 2- Database Management Systems ISBN: 978-1-78756-696-5, eISBN: 978-1-78756-695-8, Publication date: 3 October 2018
Supportive References	Database Administration: The Complete Guide to DBA Practices and Procedures, Second Edition PUBLISHED BY:Addison-Wesley Professional PUBLICATION DATE:October 2012
Electronic Materials	-
Other Learning Materials	None

2. Required Facilities and equipment

Items	Resources
facilities Classrooms, laboratories, exhibition rooms, simulation rooms, etc.	• A classroom or lecture hall with whiteboard for 25 students. • A laboratory with 25 computers.
Technology equipment projector, smart board, software, etc.	• A computer with DBMS, Oracle Express Edition installed languages installed and/or ; SQL Server, DB2 • PL/SQL developer; • High speed Internet connection; • Power outlets for student's laptop plug-in.
Other equipment (depending on the nature of the specialty)	• A laboratory that has facilities to create virtual server for each student or student team to practice with a live database.

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). •Class visit by Program Leader (indirect) Comprehensive Course report (where we can find information about teaching difficulties and action plan, …)

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of students assessment	•Students •Faculty •Peer Reviewers •Program Leader	•Surveys (indirect). •Direct feedback from students. •Course evaluation by Peer Reviewers (indirect). •Class visit by Program Leader (indirect) Exam evaluation by the Exam Evaluation Committee (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	