COURSE OUTLINE

Course Code: CSE 216

Course Title: Database Sessional

Level/Term: 2/2   **Section: A+B**

Term: January 2022

Course Outline:

Oracle SQL: Selection, Aggregation, Join, Sub-query; Oracle DML and DDL Statements; Oracle PL/SQL: Functions, Triggers, and Procedures; Design of a Database; Designing and Implementing multi-platform Database.

Learning Outcomes/Objectives:

After undergoing this course, students should be able to:

I.   Learn basic SQL statements in Oracle like selection, projection, filtering, and aggregation, and data manipulation statements like insert, update, and delete statements.
II.   Learn complex SQL statements like join and sub-query
III. Learn Oracle PL/SQL Statements to write functions, procedures, and triggers.
IV.   Apply SQL and PL/SQL in real-life system development.
V.   Design, analyze, and implement a database for a real-world system.

Assessment (Tentative)

1. Participation in lab classes and practice class performance -   10 %
2. Online Assessments -   40%
3. Term Project -   30%
4. Final Quiz -   20%

Text and Reference books:

a. *Oracle-SQL-PL-SQL - A Brief Introduction*,by Sukarna Barua [Reference]

b. *SQL, PL/SQL the Programming Language of Oracle by Ivan Bayross* [Reference]

Weekly Schedule:

Week No.	Topic Name	Type	Marks
1	Outline with grading policy, Reference books, Oracle installation, Database Learning and Evaluation System (DB-LES) Overview	Practice-1	10
2	**Project group formation** Basic SQL Lecture + Practice	Practice-2	10
3	**Project Finalization** Basic SQL Online	Online-1	20
4	Advanced SQL Lecture + Practice	Practice-3	10
5	Advanced SQL Online ERD Practice	Online-2 Practice-4	20 10
6	Project Design Review + Presentation	Project-1	30
7	PL/SQL Practice	Practice-5	10
8	**Project Milestone 1 Evaluation** Minimal Requirement: Corrected Database Design, UI Design, Connecting with Database (to be submitted after the mid-term break)	Project-2	30
9	PL/SQL Function and Procedure Online	Online-3	20
10	PL/SQL Triggers Online	Online-4	20
11	**Project Update**	Project-3	30
12	**Quiz**		40
13-14	**Term Project Final Submission and evaluation**	Project-4	60