**COURSE OUTLINE**

**Course Code: CSE 304**

**Course Title: Database Sessional**

**Level/Term: 3/1 Section: A+B**

**Academic Session: 2016-2017**

**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. Design, analyze, and implement a database for a real-world system.

**Assessment**

1. Participation in lab classes - 10%

2. Online Assessments - 40%

3. 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:**

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| --- | --- | --- |
| **Week No.** | **Topic Name** |  |
| 1 | Outline with Grading Policy and Reference books  Lecture on Basic SQL (all the queries of a single table) |  |
| 2 | Design Practice Class |  |
| 3 | **Full Design Online** |  |
| 4 | **Basic SQL Online** |  |
| 5 | Advanced SQL Practice |  |
| 6 | **Advanced SQL Online** + Project Discussion |  |
| 7 | PL/SQL Practice |  |
| 8 | **PL/SQL Online** |  |
| 9 | Project |  |
| 10 | Project |  |
| 11 | Project |  |
| 12 | Project |  |
| 13 | Quiz |  |
| 14 | Reserve |  |