**King Saud University**

**College of Applied Studies &Community Services**

**Program: Natural & Engineering Sciences Program (NESP)**

**Second Semester: 1437/ 1438**

**Database Design CT 1313**

**Instructor**: Safa'a AlBasaam

**Email**: [safalbassam@ksu.edu.sa](mailto:safalbassam@ksu.edu.sa)

**Office**: Building 26 Room 3

**Office hours:** Sunday (11-12), Monday (11-12)

**Course Objectives:**

This course is an overview of database systems, at the end of course, student should be able to use one type of database management systems, have necessary background for designing and implementing databases of moderate complexity, implement a relational database schema using SQL, write queries in relational database.

**Text Book:**

* + SQL: A Beginner's Guide”, by Robert Sheldon R. Elmasri and S. B. Navathe (2004). Fundamentals of Database system.
  + Database Systems Concepts, Silberschatz, Korth, Sudarshan, 5TH edition Mc Graw Hill.

**Reference:**

Slides, lecture notes and the text book

**Assessment Plan for the Course:**

**Midterms**  30%

**Quizzes**  10%

**Assignments and evaluations** 10%

**Final lab**  10%

**Final**  40%

**Course Topics:**

* Relational Algebra
* SQL Overview
* SQL Creating and Managing Tables
* Including Constraints
* Manipulating Data
* Writing Basic SQL Select Statements
* Restricting and Sorting Data
* Single-Row Functions
* Aggregating Data Using Group Functions
* Displaying Data from Multiple Tables
* Disk Storage Index Structures for Files

**Notes:**

* Late assignment submission will be not accepted.
* Students are encouraged to discuss assignments but not copy.
* If you miss an assignment, you will get on a zero.
* Missed exams can be made up in cases of extreme circumstances and it covers all chapters.
* Attendance is very important if you absent more than 25% you will be forbidden to enter the final exam.