

**Islamic University of Gaza**

**Faculty of Information Technology**

**(SICT 2105) Database Management System - Lab**

**2021-2022**

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**Course Description and Objectives**

The course enables students to deal with different DBMS's, and learn SQL to be able to build and make any transaction on database.

**Course Outline**

1. Introduction
2. DDL
   1. Create Database
   2. Drop Database
   3. Create Table
   4. Drop Table
   5. Alter Table
   6. Constraints
   7. Relationships
3. DML
   1. Select
   2. Insert
   3. Update
   4. Delete & Truncate
   5. Order By
   6. Main Functions (MAX, MIN, SUM, AVG, COUNT)
   7. Like
   8. Between
   9. Dates and Times
   10. Nested Query
   11. Aliases
   12. Joins
   13. Grouping

**Course Plan**

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| **Lecture #** | **Topics** |
| 1,2,3 | Introduction, Database DDL, Table DDL |
| 4,5 | Relationships, Constraints |
| 6,7 | Insert, Update, Delete, Where, Select |
| 8 | Like, Order By, Main functions, Between |
| 9 | Nested Query, Aliases |
| 10,11 | Dates and Times, Joins |
| 12 | Grouping |
| 13 | Real Example, Standards |
| 14 | Discussion of final projects |

**Course Assessment**

* Activities (40%)
* Assignments (20%)
* Attendance (10%)
* Final Project (30%)

**Course Resources**

* Famous Public Resources
  + <https://www.w3schools.com/sql/>
  + <https://www.edx.org/learn/sql>
  + <https://www.hackerrank.com/domains/sql>