## **Cpt-140 Database Concepts**

## Week 4: SQL Programming 1 (SQL1)

## **Learning Objectives.**

In this topic we look at the basic structure of simple SQL queries and work they works. We also consider several basic query functions such as setting selection conditions, how to set compound selection conditions, how to select what we want in the output, grouping, aggregations, ordering and others.

Know the syntax and operation of a basic SQL query.
Know how to use expressions in the Select line.
Know how to set up condition tests in the Where clause to select the correct tuple s fo output.
Know how set up multiple selection criteria using brackets, AND, OR and NOT.
Know the keywords for string testing and the associated wildcard characters.
Know how to test in a field is set to NULL or not set to NULL.
Be able to use the Group By function. Know how it changes the output.
Know how to use aggregations and how aggregations and Group By operate together.
Be able to explain the difference between Distinct and Group By.
Be able to use Having to make selections based on Grouped data.