WILMINGTON UNIVERSITY
COLLEGE OF TECHNOLOGY
BASIC COURSE INFORMATION

COURSE TITLE: Database Fundamentals

COURSE NUMBER: CSC 345

SUPPLEMENTAL MATERIALS: MySQL database

MAJOR INSTRUCTIONAL OBJECTIVES:

GOAL A: Demonstrate comprehension of Structured Query Language (SQL).
Learning Outcomes:
A-1: Be able to define terms and concepts associated with SQL.
A-2: Be able to query a database, save query, modify, and execute a saved query.
A-3: Be able to perform a conditional search: search using one or more conditions, search for a range of values and NULL values, search data based on patterns.
A-4: Be able to work with functions: perform date calculations, calculate data using aggregate functions, manipulate string values.

GOAL B: Demonstrate comprehension of working with and extracting information from databases.
Learning Outcomes:
B-1: Be able to organize data: sort data, rank data, group data, filter grouped data, summarize grouped data, use PIVOT and UNPIVOT operators.
B-2: Be able to retrieve data from multiple tables: combine and compare the results of two queries, retrieve data by joining tables.
B-3: Be able to export query results: generate a text file, generate an XML file.
B-4: Be able to use subqueries to perform advanced querying: search based on unknown values, compare a value with unknown values, search based on the existence of records, generate output using correlated subqueries, filter grouped data within subqueries, perform multiple-level subqueries.

II   CLASS PARTICIPATION:

Students are expected to attend class and participate actively and in a positive way. Questions and relevant observations are encouraged and enrich the experience of the entire class. Computers in the classroom are intended to be used as tools to enhance the students' learning experience. Instant messaging, gaming, emailing and surfing the web are distractions to the student, the surrounding students, and the instructor and constitute inappropriate behavior. Students are ethically obliged to avoid these and similar practices.