Catalog Description: The objective of the course is to study the concepts and principles of database management systems (DBMS). Topics include advanced database concepts, transactions, concurrency, and recovery in DBMS.

Credit Hours: 3 Credit hours: 3 Lectures per week 0 Labs. per week 0 Recitation per week

Prerequisites: CS370 - Introduction To Database

Course Learning Outcomes:
Upon completion of the course the student should be able to:
1. Understand the concepts of EER and normalization and to learn the Advanced SQL
2. Understand the concepts of transaction management, concurrency control, recovery, and indexing & hashing
3. To learn how to be an effective project team member

Major Topics:
- Introduction to DBMS
- Database System Architecture
- EER model
- Advanced SQL
- Normalization
- Transaction management
- Concurrency Control
- Query Processing and Optimization
- Indexing and Hashing

Grading:  

- The grading scale for this course is:
  - 95 - 100  A+  Passing
  - 90 - 94   A   Passing
  - 85 - 89   B+  Passing
  - 80 - 84   B   Passing
  - 75 - 79   C+  Passing
  - 70 - 74   C   Passing
  - 65 - 69   D+  Passing
  - 60 - 64   D   Passing
  - 0  - 59   F   Failing

- Final grades will be determined based on the following components:
  - 60% Semester Work
  - 40% Final Exam

- Students may not do any additional work for extra credit nor resubmit any graded activity to raise a final grade.

- Late submissions will not be accepted for any graded activity for any reason.

- Students have one week to request the re-grading of any semester work.

Attendance Policy: Students should attend 80% of the overall course hours taught in the semester as per the University regulations.

If a student fails to achieve this portion, he/she shall not be allowed to appear in the final exam and shall be awarded "DN" grade and repeat the course.

Cheating and Plagiarism Policy: The instructor will use several manual and automated means to detect cheating and/or plagiarism in any work submitted by students for this course.

When a student is suspected of cheating or plagiarism, the instructor raises the issue to the disciplinary committee.
Communications: Registered students will be given access to a section of the Blackboard Learning System for this course. Bb will be used as the primary mechanism to disseminate course information, including announcements, lecture slides, assignments, and grades.

Communication with the instructor on issues relating to the individual student should be conducted using CIS email, via telephone, or in person.