# Databases and Information Systems CS 303

Introduction, Course Structure, Rules and Regulation

### Course Outline

- Data Models Relational Data Model
- Query Languages Relational Algebra, SQL, Formal QL DRC, TRC
- Application Design using Relational Databases
- Data Models Entity Relationship (ER) Data Model
- Normalization of Databases
- Data Storage Concepts Secondary Storage, Indexing, etc.
- Query Processing and Optimization
- Transaction Management.
- Advanced Databases such as NoSQL, Cassandra, etc. (if time permits)

#### CS 303

#### Class Hours and Location:

• Slot 5

**Monday 10:30 AM – 11:30 AM (Proposed)** 

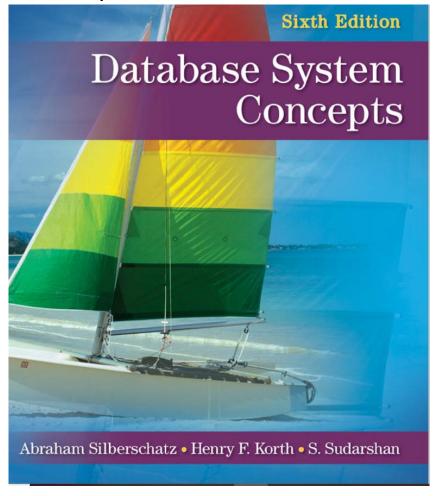
**Tuesday** 10:30 AM – 11:30 AM,

**Thursday** 09:30 AM - 10:30 **AM** 

Wednesday (Doubt Clearing, Seminars, Quizzes) 08:30 AM - 09:30 AM,

#### Textbook and References

• 1. Abraham Silberschatz, Henry F Korth, S. Sudersan, Database System Concepts, 6<sup>th</sup> Edition



## Grading Policy:

<b>Evaluation Component</b>	Weightage
Quiz 1 and Quiz 2	25% [2 quizzes of equal weightage]
Mid Semester Exam	25% (During mid semester week)
End Semester Exam	25% (During End semester week)
Assignments	25% [4-5 Assignments/In-Classroom quizzes.]

## Important Dates

<b>Evaluation Component</b>	Date
Quiz 1	1 <sup>st</sup> September 2022 (Thursday)
Mid Semester Exam	4 <sup>th</sup> Week of September. (19 – 25 <sup>th</sup> September 2022)
Quiz 2	19 <sup>th</sup> October 2022 (Wednesday)
End Semester Exam	3 <sup>rd</sup> Week of November (14 <sup>th</sup> – 20 <sup>th</sup> Nov. 2022)

#### Gdrive links have been created

• For Assignments, Lecture materials:

 https://drive.google.com/drive/folders/1 LmfT2LdkObFZ6JoNNCyRRz 8t-deq9Ci?usp=sharing

#### Rules

- Attendance: As per Institute Policy
- Copying in Exam: Penalty as per Institute Policy
- Assignment Submission deadlines to be strictly followed
- Occasional re-scheduling of classes based on Slot availability
- No make-up exams
- Course materials: Slides and Assignments will uploaded on Moodle.
- All classes are interactive