COP-5725 Principles of Database Management Systems

Catalog Description
Overview of Database Systems, Relational Model, Relational Algebra and Relational Calculus; SQL; Database Applications; Storage and Indexing; Query Evaluation; Transaction Management; Selected database topics will also be discussed. (3 credits)

Prerequisites
COP4540

Type
Required for MSCS

Course Objectives
This is a graduate level course that introduces the principles of database management systems. After the students successfully finish this course, they should have a better understanding on different aspects of a database management system. They should also be familiar with relational model, SQL, storage and indexing, query evaluation, transaction management, and some selected topics.

Topics

- Database Design
- Relational Model
- Relational Algebra and Calculus
- Schema Refinement and Normal Forms
- SQL
- Indexing and Storage
- Query Evaluation and Optimization
- Transaction Management
- Concurrency Control
- Crash Recovery

Textbook

Last Update
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