

Textbook chapters are listed with the associated topics.

Also, consider the associated Links and References (Canvas, On-Line) provided in the class schedule.

Topics:

- **Ch 1: Introduction**
 - Databases (What?, Why?, How?)
 - Relational Data Model and Databases
 - Database Design
 - Database Architecture
- **Ch 2: Relational Algebra (if time permits)**
 - Structure of Relational Databases
 - Database Schema
 - The Relational Algebra
 - Select
 - Project
 - Set Operators (union, intersection, and set-difference)
 - Join
 - Cartesian Product
 - Renaming
- **Chs 3, 4, and 5: SQL**
 - Overview of The SQL Query Language
 - SQL Data Definition
 - Keys (Super Keys, Candidate Keys, Primary key, Foreign Keys)
 - Basic Query Structure of SQL Queries
 - Select, Insert, Update, Delete
 - Order By
 - Set Operations (Union, Intersection and Set-difference)
 - Null Values
 - Aggregate Functions (count, min, max, sum, avg)
 - Grouping, Having Clause
 - Subqueries (Nested Queries)
 - Join Expressions
 - Natural (Inner) Join, Left (Outer) Join, Right (Outer) Join, Self Join
 - Views
 - Integrity Constraints
 - SQL Data Types and Schemas
 - Authorization
 - Functions and Procedures
 - Triggers