

Course No.	CS 631-102, CRN 16095
Title	Data Management Systems Design – Spring 2024
Lectures	Wednesday 6:00pm – 8:50 PM Memorial Hall Room 213 Office Hours Remote and By Appointment -Access Link: https://njit.webex.com/meet/bjf2
Instructor	Bruce Forman Cell Phone: 908-418-6078 Email: bjf2@njit.edu
Objective	The objective of the course is to introduce database systems. The course focuses on the following issues: Relational Database Model, Formal and Commercial Database Languages (Relational Algebra and SQL), Database Design, Storage (File Organizations, External Hashing, Indexing), Query Processing and Optimization, Formal Database Design (Normalization) and Transaction Processing and Concurrency Control. The students will learn how to design and implement a database application through a small project. They will get hands-on experience with commercial database management systems (DBMS) by writing application programs that involve the commercial DBMS query language SQL.
Textbook	R. Elmasri & S. B. Navathe. Fundamentals of Database Systems. Addison Wesley, 7th edition, 2015, ISBN 0-13-397077-9.
Grading	Assignment 1 = 20% Assignment 2 = 20% Assignment 3 = 25% Final Exam = 35% Assignment Note: All assignments are due at 6PM the evening of class. Late assignments are penalized 10% per day unless you have received permission from me.
Lecture Schedule	1/17/24: Chapter 1,2: Introduction to Databases 1/24/24: Chapter 3,4: Entity Relationship (ER) Model 1/31/24: Chapter 5: Relational Data Model 2/7/24: Chapter 14: Normal Form 2/14/24: Chapter 14: Normal Form Assignment 1 Distributed 2/21/24: Chapter 8: Relational Algebra Assignment 1 Due 2/28/24: Chapter 8: Relational Algebra 3/6/24: Chapter 8: Relational Algebra Assignment 2 Distributed 3/13/24: Chapter 6: SQL Assignment 2 Due 3/20/24: Chapter 6: SQL 3/27/24: Chapter 6: SQL 4/3/24: Thanksgiving Recess – No Class 4/10/24: Chapter 7: SQL Assignment 3 Distributed 4/17/24: SQL Assignment 3 Due 4/24/24: Other Topics 5/8/24: Final Exam

Academic Integrity	<p>“Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: <u>NJIT Academic Integrity Code</u>.</p> <p>Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing, or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at <u>dos@njit.edu</u>”</p>
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