

Spring 2020

CS 631-104: Data Management Systems Design

Bruce Forman

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| Course No. | CS 631-104; Kupfrian Hall; Room 208 |
| Title | Data Management Systems Design – Spring 2020 |
| Lectures | Wednesday 6:00pm – 8:50 PM |
| Instructor | Bruce Forman Cell Phone : 908-418-6078 Email : bforman13@gmail.com |
| Objective | <p>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.</p> <p>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.</p> |
| Textbook | R. Elmasri & S. B. Navathe. Fundamentals of Database Systems. Addison Wesley, 7th edition, 2015, ISBN 0-13-397077-9. (required) |
| Grading | <p>Assignment 1 = 15% Assignment 2 = 20% Assignment 3 = 20% Assignment 4 = 20% Final Exam = 25%</p> <p>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.</p> |
| Lecture Schedule | <p>1/22/20 : Chapter 1,2: Introduction to Databases 1/29/20: Chapter 3,4: Entity Relationship(ER) Model 2/5/20: Chapter 5: Relational Data Model Assignment 1 Due 2/12/20: Chapter 14: Normal Form 2/19/20: Chapter 8: Normal Form Assignment 2 Due 2/26/20: Chapter 8: Relational Algebra 3/4/20: Chapter 8: Relational Algebra 3/11/20: Chapter 6: Relational Algebra Assignment 3 Due 3/25/20: Chapter 6: SQL 4/1/20: Chapter 6: SQL 4/8/20: Chapter 7: SQL 4/15/20: Chapter 7: SQL Assignment 4 Due 4/22/20: SQL 4/29/20: Assorted Topics 5/13/20: Final Exam</p> |