

CSCI 526 Database Systems

INSTRUCTOR:

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Office Hours: To be announced in the second week of semester

CLASS MEETINGS:

Online. Exams will be given in class. Course projects will be presented in the class. Date and room will be announced.

MANDATORY TEXTBOOKS:

- Fundamentals of Database Management Systems ISBN-10: 0471262978 by Mark L. Gillenson, John Wiley & Sons, Inc.
- SQL Essentials ISBN-10: 1590280296 by G. Randolph, J. Griffin, Franklin, Beedle & Associates

Supplementary Texts:

- Harrington, J. L., "Relational Database Design Clearly Explained", Morgan Kaufmann Publishers, ISBN 0123264251, August, 1998
- Fleming, C. C. et al, "Handbook of Relational Database Design", Addison-Wesley, ISBN 0201114348, August 1988

TOPICS TO BE COVERED

Data models; data definition language; data manipulation language; entity-relation(ER) diagram; design of ER database scheme; relational model; relational databases; relational commercial languages; functional dependencies; normalization.

STUDENT LEARNING OUTCOMES (to be used in the assessment of this course)

- Students will be able to write SQL programs for effective data definition and manipulation
- Students will be able to develop ER diagrams for logical design of database systems
- Students will be able to perform data normalization process for effective data management
- Students will be able to implement and present a small scale database development project using commercially available DBMS tools
- Students will be able to master the technique for team play and teamwork for small scale database projects through brain storming and joint requirement planning

TENTATIVE COURSE OUTLINE:

Introduction to Database Systems
Data Modeling & Introduction to SQL
Database Concepts & SQL
Relational Model & SQL
Logical DB Design & SQL
Physical DB Design & SQL
Data Administration & Meta Data
Security, Backup, Recovery, Concurrency
Final Project

EVALUATION:

Your grade for the course will be based on the following percentages (tentative):

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|-------------------------|-----|
| Test 1 | 30% |
| Assignments and Quizzes | 10% |

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|---------------------|-----|
| Course Project | 30% |
| Final Test (Test 2) | 30% |

You should do your own work on exams/projects and for computer assignments. Copying another student's work is not acceptable. Any indication of cheating and/or plagiarism on an exam/assignment/project will be an automatic 0 (zero) for the exam/assignment/project for all students involved. Yet, based on cheating and plagiarism activity in any section of class, instructor holds the right to give F grade to the identified student(s). Regarding codes in assignments / projects, you may be required to explain the code you submitted. In case of discursive explanation, the instructor holds the right to lower your grade.

Letter grades will be assigned according to the following scale:

- A - at least 90% of the total points
- B - at least 80% of the total points
- C - at least 70% of the total points
- D - at least 60% of the total points
- F - less than 60% of the total points

STUDENTS WITH DISABILITIES

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services, Texas A&M University-Commerce
Gee Library, Room 132, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

SMOKE, VAPOR & TOBACCO FREE ENVIRONMENT

University Procedure 34.05.99.R1 now prohibits the use of vapor/electronic cigarettes, smokeless tobacco, snuff and chewing tobacco inside and adjacent to any building owned, leased, or operated by A&M – Commerce.

ACADEMIC ETHICS

“All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.” (See Student's Guide Handbook, Policies and Procedures, Conduct). Absolutely no usage of laptops and cellular devices (texting and talking) in class. Talking and other activities that distract/disturb others in the class would not be tolerated. Instructor holds the right to ask you leave the classroom anytime based on any of disturbing attitude. Each student should sign the sign-sheet if asked by instructor. Late student may not be allowed to participate the lecture. No food and drink in the class.

ATTENDANCE POLICY:

Attendance is mandatory. Late students will not be welcomed by others . Students are expected to be present at all class lectures and are responsible for all material covered in class and assigned in readings.

COURSE REQUIREMENT DEADLINES:

Credit will be given for ONLY those exams, programs, and/or projects turned in no later than the deadline as announced by the instructor of this class, unless prior arrangement has been made with the instructor. Late programs / projects / assignments can or cannot gain partial credit. Credit for late programs / projects / assignments will be announced with the description of it.

Assignments and projects will be posted in university's eCollege communication system. Detailed information will be provided by the instructor. Students also should turn in their assignments through eCollege portal. Each student is responsible for the content/instructions of email communications.