

CSCI526-01W

Introduction to Databases

Spring, 2024

Class Meetings: Web-based online (21821) , 1/10/2024-5/10/2024

Instructor:

Name: Dr. S. Suh
Regents Professor, Texas A&M University System
Professor, Department of Computer Science, TAMUC
Office: Jour 223;
Office Hours: R (9-11AM, 1-2PM, 3-4PM, 5-6PM, other hours by appointment)
Phone: 903.468.8199;
Fax: 903.886.5404;
E-mail: sang.suh@tamuc.edu (Preferred form of communication)

Textbook required:

- Concepts of Database Management, 10th Edition, ISBN-10: 0357422082 | ISBN-13: 9780357422083, Lisa Friedrichsen | Lisa Ruffolo | Ellen Monk | Joy L. Starks | Philip J. Pratt | Mary Z. Last, Cengage Learning,2021.

Course Description:

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 (SLO):

1. Be able to write SQL programs for effective data definition and manipulation
2. Be able to develop ER diagrams for logical design of database systems
3. Be able to perform data normalization process for effective data management
4. Be able to implement and present a large scale database development project using commercially available DBMS tools
5. Be able to master the technique for team play and teamwork for large scale database projects through brain storming and joint requirement planning

COURSE REQUIREMENTS:

Minimal Technical Skills Needed

Using Microsoft Word and PowerPoint, using presentation and graphics programs, etc.

Instructional Methods

Delivery modalities: Face to face blended with D2L online platform

Course structure: Lecture-oriented course

Learning activities: Problem-solving practices, Q&A session, team projects and exercise practice

Assessments: Quizzes, tests, project development, and presentation

Tips for Success in the Course

- Completion of weekly exercise assignment (2 hours estimated weekly)
- Weekly preview of chapters to be covered (2 hours estimated weekly)
- Review of chapters covered (1 hour estimated weekly)

Student Responsibilities:

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course. Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

<https://inside.tamuc.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedure/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

13.99.99.R0.10 Graduate Student Academic Dishonesty

<https://inside.tamuc.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedure/13students/graduate/13.99.99.R0.10.pdf>

Method of Evaluation (*Tentative*):

Midterm	(30%)
Final Exam	(40%)
Implementation Project	(20%)
Homework/quizzes	(10%)

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

Relationship between the assessments and course-level student learning outcomes:

Student Learning Outcomes	SLO1	SLO2	SLO3	SLO4	SLO5
Assessment Methods Used	Midterm Exam, Quizzes	Midterm Exam, Quizzes	Final Exam, Quizzes	Final Exam, Quizzes	Course Project, Project Test

TECHNOLOGY REQUIREMENTS (LMS)

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support

Need Help?

Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

COMMUNICATION AND SUPPORT:

Preferred form of communication: Email

Communication response time: 48 hours

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Policies:

Attendance/Lateness: Students are expected to be present at all class lectures. The maximum number of excused absences allowed per semester will be 3. 3 or more absences will automatically result in F as course grade.

Late Work: Under no circumstances will the late work be accepted. If a student is absent from class on the due date of any assignment, they are expected to make alternative arrangements to assure that the assignment is turned in ON TIME.

Credit will be given for ONLY those assignments, programs, and/or projects turned in no later than the deadline as announced by the instructor of this class.

Missed Exams and Quizzes: Missed exams and quizzes will result in 0 in all circumstances.

Extra Credit: No extra credit work will be given under any circumstances.

Withdrawal: Any student wishing to withdraw from the course must do so officially as outlined in the class schedule. THE INSTRUCTOR CANNOT DROP OR WITHDRAW ANY STUDENT.

Syllabus Change Policy:

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

UNIVERSITY SPECIFIC PROCEDURES

Student Conduct:

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

<http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf> Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette

<http://www.albion.com/netiquette/corerules.html>

TAMUC Attendance:

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity:

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

Graduate Student Academic Dishonesty 13.99.99.R0.10

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

ADA STATEMENT

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

Gea Library- Room 162, Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice:

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement:

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903- 886-5868 or 9-1-1.

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.

Course Outline/Calendar:

WEEKS	SUBJECTS TO BE COVERED
1 (1/11)	Introduction to Course
2 (1/15)	Chapter 1 Introduction to Database Management
3 (1/22)	Chapter 2 The Relational Model: Introduction, QBE, and Relational Algebra
4 (1/29)	Chapter 3 Relational Model: SQL
5 (2/5)	Chapter 4 The Relational Model: Advanced Topics
6 (2/12)	Project Phase I The Relational Database Project Requirement Specification
7 (2/19)	Review (Chapters 1-4)
8 (2/26)	Midterm Exam (Chapters 1-4)
9 (3/4)	Chapter 5 Database Design: Normalization
(3/11-3/15)	Spring Break
10 (3/18)	Chapter 6 Database Design: Relationships
11 (3/25)	Chapter 7 DBMS Functions
12 (4/1)	Chapter 8 Database Industry Careers
13 (4/8)	Project Phase II (The Relational Database Design and Implementation)
14 (4/15)	Review (Chapters 5-8)
15 (4/22)	Final Exam (Chapters 1-8)
16 (4/29)	Project Phase III (Project Demos and Presentation)
17 (5/6)	QnA and Forum

* The course outline/calendar may be subject to change.