CSCI-340-01W Introduction to Database

COURSE SYLLABUS: SPRING 2025

INSTRUCTOR INFORMATION

Instructor: Yan Li, Ph.D., Adjunct Faculty, Computer Science and Information Systems

Office Location:	Online, must log in myLeo Online
Office Hours:	Online, per request
Office Phone:	469-585-4651
Office Fax:	None
University Email Address:	Yan.Li@tamuc.edu
Preferred Form of Communication**:**	Email
Communication Response Time:	One business day

Instructor Availability:
To communicate with the instructor about this course please use the email address yan.li@tamuc.edu. Please include the course number (CSCI-340-01W) in the beginning of the subject field for every email message. You may generally expect a response to your emails within 1 business day. However, if you do not receive my reply in 2 business days, please email the instructor again.

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Lecture: Web Based Class (myLeo Online)

Textbook(s):

Required:
Fundamentals of Database Management Systems, 3ed., by Mark L. Gillenson.
ISBN-13: 978-1119907466

Online resources for assigned learning, such as https://www.w3schools.com/sql/, youtube videos, etc.

Course Description

This course is an introduction to database systems and information management. It is designed to develop entry-level knowledge and skills in data modeling, design, and the representation of information in relational database systems. Structured Query Language and advanced features of relational database systems will be utilized to develop database applications. In addition, this course will include topics on the physical characteristics of databases, techniques for improving access to information, and improving performance and reliability with relational database systems.

Prerequisites: CSCI 233 and COSC 2336 or concurrent enrollment with COSC 2336.

Supplementary information for the course is available at myLeo online (D2L Brightspace). Log on with your Access ID for class notes, lecture slides, class announcements, the course syllabus, and other information for the course. You will submit your assignments and project and check grades there too.

Student Learning Outcomes (Should be measurable; observable; use action verbs)

Topics covered in this course include the following:

- Data Modeling
- Relational Data Retrieval: SQL
- Logical Database Design
- Physical Database Design
- Data Administration, Database Administration, and Data Dictionaries
- Database Security, Backup and Recovery
- Database and the Internet

Upon completion of the course, the student will be able to:

- Install, configure, and interact with a relational database management system;
- Describe and apply the components of the relational database model to database design;
- Apply the Structured Query Language (SQL) for database definition and manipulation;
- Utilize a database modeling technique for a single entity class, a one-to-one (1:1) relationship between entity classes, a one-to-many (1:M) relationship between entity classes, a many-to-many (M:M) relationship between entity classes;
- Comprehend then implement web database programming fundamentals by developing an application program interface (API) to access and maintain a relational database;
- Learn and implement the principles and concepts of information integrity, security and confidentiality;
- Apply ethical computing concepts and practices to database design and implementation.

  (These outcomes are measured by Assignments, Final project, Exams, etc.)

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Using computers, operating systems, and Microsoft Word

Instructional Methods

This course is an online class. To get started with the course, go to: https://leoportal.tamuc.edu. Sign in to myLEO. You will need your CWID and password to log in to the course.

Student Responsibilities or Tips for Success in the Course

1. Make-up examinations for exams will not be given without valid documents. If you have a compelling and documented reason for not being able to attend the exam, you must make the alternative arrangements before the examination. Grades will not be curved for the course, and you will receive the grade that you earn through your performance on the quizzes, assignments, projects, exams, and bonus questions. There will be no individual exceptions to the grading policy, and, therefore grades of a D or F are possible.
2. No late work will be accepted except under special extenuating circumstances when prior arrangements have been made with the instructor.
3. Grades will be posted within one week after assignment due date.
4. You are responsible to check your grades after each assignment. Please report any error or inconsistency to the instructor within 7 days if possible.
5. All assignments must be submitted using myLeo online if applicable.
6. All students are requested to access their university e-mail account regularly. You may be contacted when important matters arise. If you have any questions about the course or need assistance, please contact the instructor by e-mail at any time.
7. All submitted assignments should be "backed up" in both soft copy (electronic version) on your PC's hard drive or other media such as a USB flash drive (labeled with your name and class period). This backup will be requested in the event errors occur during the "submit" process.

GRADING

Letter grades for the course will be assigned according to the scale of the percentages below:

A	90% -100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	59% or Below

Assessments

End-of-semester numeric scores will be weighted as follows.

- Assignments 50%
- Midterm Exam 25%
- Final Project 25%

Notes:

A. Assignments:

Every week there would be an assignment that should be solved independently and tightly related to the class materials and topics. Submissions are always expected to be finished in a good shape by deadlines. All assignment must be formally submitted to the assignment folder. Email or any other formats of submissions do not count and will not be graded. If you have difficulty accessing D2L temporarily, you can email me your assignment as a proof of on-time submission. However, you still need to upload it to the assignment folder as soon the issue is resolved to receive credit.

No late assignments would be allowed without instructor's permission. The instructor should be prior notified with adequate verifiable documentation or reasoning (e.g., medical letters or police reports). Without any valid documentary evidence, a 10% per day late penalty would be applied to submissions. Submissions later than a week will not be accepted.

B. Exam

Midterm Exam is open book. The time, location and format of the midterm exam will be announced one week before the exam. All students are expected to be available for exam. The instructor should be notified in advance in the event that students will be absent with adequate verifiable documentation (e.g., medical letters or police reports). Failure to do so may result in the student receiving zero for the missed exam.

You should do your own work on exam, assignments and final project. Copying another student's work is not acceptable. Any indication of cheating or plagiarism will result in an automatic 0 (zero) 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). You may be required to explain what you submitted. In case of discursive explanation, the instructor holds the right to lower your grade.

C. Attendance

For this online course, Students are required to keep up with class materials and announcements, including changes to due dates for assignments, project. Attendance will be evaluated based on the submission of all assignments and project.

D. Final project

The final project consists of problems, solutions, and a project report. More details will be provided in the final project guideline.

E. Bonus credit

According to the quality, completion, and/or creativity of assignments, project and exam, students may be awarded bonus credits in some cases.

There are also chances students may earn bonus points by completing extra assignment/question/project.

Additional notes:

This is an online class. The myleo (D2L) portal will be used for information and resource sharing. Slides, Assignments, Project, Exam will be uploaded to D2L course shell. Students are responsible for obtaining and setting up their D2L account using their TAMUC student login. They need to follow the D2L course shell daily for the course announcements, downloading and uploading the assignments, and other course activities.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by East Texas A&M University 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

Zoom Video Conferencing Tool
https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

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 MyLeo Online (D2L 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
MyLeo Online (D2L) Frequently Asked Questions:
http://www.tamuc.edu/facultyStaffServices/academictechnology/_documents/d2l/D2LFAQ.pdf

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.

Interaction with Instructor Statement

The primary mode of asynchronous communication is email. My email address is yan.li@tamuc.edu. Usually I email you using a tool in myLeoOnline, where I cannot see/edit your email address. The emails I send through the myLeoOnline go to the email address you associated with myLeo system. It could be your @leo.tamuc.edu or other email address from other domains you selected (gmail, yahoo, outlook, etc.). In the first week of semester, I will email you and ensure that you receive this email to establish an electronic communication between you and me. I usually response students' emails in 24 hours. Please wait 24 hours to remind the issue again in the emails. My number is 469-585-4651; however, the least preferred way of communication is phone calls because of untraceable nature of the actions. If need be, I can give you a phone call appointment to discuss a course issue.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Class Decorum Civility in the classroom or online course and respect for the opinions of other is very important in an academic environment. It is likely you may not agree with everything that is said or discussed in the classroom/online course. Courteous behavior and responses are expected. To create and preserve a learning environment that optimizes teaching and learning, all participants share a responsibility in creating a civil and non-disruptive forum. Students are expected to conduct themselves at all times in a manner that does not disrupt teaching or learning. Faculty have the authority to request students who exhibit inappropriate behavior to leave the class/online course and may refer serious offenses to the University Police Department and/or the Dean of Students for disciplinary action. (See Student Guidebook)

Academic Honesty

It is the policy of the University, the History Department, and the instructor that no form of plagiarism or cheating will be tolerated. Plagiarism is defined as the deliberate use of another's work and claiming it as one's own. This means ideas as well as text, whether paraphrased or presented verbatim (word-for-word). Cheating is defined as obtaining unauthorized assistance on any assignment. Collusion is defined as selling or purchasing academic products with the intention that they be submitted to fulfill an academic or course requirement. Proper citation of sources must always be utilized thoroughly and accurately. Cheating/plagiarism/collusion will result in a grade of "0" for the assignment and may also result in failure of the course and/or disciplinary action by the University. Any student found guilty of violating academic integrity policy will fail the assignment in question, will automatically fail the course and will be subject to disciplinary action by the university (see East Texas A&M University Code of Student Conduct 5.b. [1,2,3]). Further information on the history department's plagiarism policy can be found on the department webpage. If you are unclear about what constitutes academic dishonesty, ask.

Writing Center

Students are encouraged to take advantage of the Writing Center's resources for assistance with drafting their written assignments. Although the center will not write your paper for you, it may help you to improve your writing skills. If you use the Writing Center, plan in advance. Because it can only help you if there is adequate time to incorporate their suggestions into your paper.

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.

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette
https://www.britannica.com/topic/netiquette

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

Academic Integrity

Students at East Texas A&M University 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
Undergraduate Student Academic Dishonesty Form

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

https://inside.tamuc.edu/aboutus/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10
Graduate Student Academic Dishonesty Form

https://inside.tamuc.edu/aboutus/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10.pdf

Students with Disabilities-- ADA Statement

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

East Texas A&M University
Gee 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
https://inside.tamuc.edu/campuslife/campusservices/StudentDisabilityServices/default.aspx

Nondiscrimination Notice

East Texas A&M University 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 East Texas A&M University 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 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.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit http://www.tamuc.edu/counsel

AI use policy [Draft 2, May 25, 2023]

East Texas A&M University 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

13.99.99.R0.10 Graduate Student Academic Dishonesty

Department or Accrediting Agency Required Content

COURSE OUTLINE / CALENDAR

01/13/2025 through 05/9/2025
Tentative Schedule by Week

Week	TOPICS
W01 1/13 – 1/17	Introduction to Database Systems.
W02 1/20 – 1/24	Data Modeling
W03 1/27 – 1/31	Database Management System Concept
W04 2/3 – 2/7	Relational Database Model: Introduction
W05 2/10 – 2/14	Relational Database Model: Additional Concept
W06 2/17 – 2/21	Relational Data Retrieval: SQL
W07 2/24 – 2/28	Midterm Review
W08 3/3 – 3/7	**Midterm exam**
W09 3/10 – 3/14	**Spring Break**
W10 3/17 – 3/21	Logical Database Design.
W11 3/24 – 3/28	Physical Database Design
W12 3/31 – 4/4	Data Administration, Database Administration, and Data Dictionaries
W13 4/7 – 4/11	Database security, Backup and Recovery
W14 4/14 – 4/18	Final project assignment
W15 4/21 – 4/25	NoSQL Database Management
W16 4/28 - 5/2	Database in the Cloud
W17 5/3 - 5/9	**Final project due**

Note: The course contents/order are subject to change. Changes will mostly be based on the feedback and suggestions from students.

HAVE A HAPPY AND SUCCESSFUL SEMESTER!