



## **CSCI-340-01W Introduction to Database**

COURSE SYLLABUS: FALL 2022

### **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](mailto: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](mailto: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 me again.

### **COURSE INFORMATION**

#### **Materials – Textbooks, Readings, Supplementary Readings**

**Lecture: Web Based Class (myLeo Online)**

**Textbook(s):**

**Required:** Fundamentals of Database Management Systems, 2ed., by Mark L. Gillenson. ISBN 978-0-470-62470-8. John Wiley & Sons, Inc.

Reference: Murach's MySQL 3ed. or earlier ed., by Murach, Joel. ISBN: 978-1-943872-36-7. Mike Murach & Associates, Inc.

Online resources as well as some classic papers, may also be a source of assigned readings.

## 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://leo.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 30%
- Final Project 20%

### 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.

#### 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 quizzes, 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, Exams 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**

### **Browser support**

D2L is committed to perform key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.

- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

### Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

### Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or <b>point</b> release of that major version) and the previous major version of iOS (the latest minor or <b>point</b> release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version.  Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - 1 GB of RAM, 2 GB or more preferred
  - Broadband connection required courses are heavily video intensive
  - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
  - Sound card, which is usually integrated into your desktop or laptop computer Speakers or headphones.
  - \*For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site http://www.java.com/en/download/manual.jsp](http://www.java.com/en/download/manual.jsp)
- Current anti-virus software must be installed and kept up to date. Running the browser check will ensure your internet browser is supported.  
Pop-ups are allowed.  
JavaScript is enabled.  
Cookies are enabled.
- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - [Adobe Reader https://get.adobe.com/reader](https://get.adobe.com/reader)
  - [Adobe Flash Player \(version 17 or later\) https://get.adobe.com/flashplayer](https://get.adobe.com/flashplayer)
  - [Adobe Shockwave Player https://get.adobe.com/shockwave](https://get.adobe.com/shockwave)
  - [Apple Quick Time http://www.apple.com/quicktime/download](http://www.apple.com/quicktime/download)
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

## **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](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](mailto: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](mailto: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 Texas A&M University-Commerce 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](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

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>

<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>

## **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**

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto: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 [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.

## **COURSE OUTLINE / CALENDAR**

08/29/2022 through 12/16/2022

Tentative Schedule by Week

Week	TOPICS
W01 8/29 – 9/02	Review Class Syllabus. Introduction to Database Systems
W02 9/05 – 9/09	Data Modeling
W03 9/12 – 9/16	Database Management System Concept
W04 9/19 – 9/23	Relational Database Model: Introduction
W05 9/26 – 9/30	Relational Database Model: Additional Concept
W06 10/3 – 10/7	Relational Data Retrieval: SQL
W07 10/10 – 10/14	Midterm Review
W08 10/17 – 10/21	Midterm exam
W09 10/24 – 10/28	Logical Database Design
W10 10/31 – 11/04	Physical Database Design
W11 11/07 – 11/11	Data Administration, Database Administration, and Data Dictionaries
W12 11/14 – 11/18	Database security, Backup and Recovery
W13 11/21 – 11/25	Final Project starts. Thanksgiving Week.
W14 11/28 – 12/02	Database and the Internet
W15 12/05 – 12/09	Final project week
W16 12/10 – 12/16	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!**