

# COSC 340, Section: 61E, Database

COURSE SYLLABUS: Spring 2025

### **INSTRUCTOR INFORMATION**

Instructor: Mike McHugh Office Location: BLRA 310H (Blinn Admin Bldg) Office Hours: After Class, M, W, Fri 8-11 (Zoom) Office Phone: 979-821-1994 Office Fax: University Email Address: michael 'dot' mchugh 'at' tamuc 'dot' edu Preferred Form of Communication: email Communication Response Time: 24 hrs

## **COURSE INFORMATION**

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required:

Fundamentals of Database Management Systems 3rd Edition, by Mark L. Gillenson (John Wiley & Sons, Inc.). ISBN-10: 1119907462. ISBN-13: 978-1119907466

Software Required: MySQL (database and workbench ( https://www.mysql.com ))

Optional Texts and/or Material None

### **Course Description**

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

- 1. Install, configure, and interact with a relational database management system
- 2. Describe, define and apply the major components of the relational database model to database design
- 3. Learn and apply the Structured Query Language (SQL) for database definition and manipulation
- 4. 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, and recursive relationships
- 5. Define, develop and process single entity, 1:1, 1:M, and M:M database table
- 6.Comprehend then implement web database programming fundamentals by developing an application program interface (API) to access and maintain a relational database
- 7.Learn and implement the principles and concepts of information integrity, security and confidentiality
- 8.Apply ethical computing concepts and practices to database design and implementation.
- NOTE: These outcomes will be measured by Final project, exam, homework, and lab assignment results

### **COURSE REQUIREMENTS**

#### **Minimal Technical Skills Needed**

Students are expected to setup database client and web servers as instructed.

### **Instructional Methods**

During this course, we will be using traditional and active learning methods, and work together using:

• Lectures: using slides, supplementary materials, and hands-on exercises.

Assignments that will be released via the Learning Management Systems (D2L).

• Individual projects: details of the project will be released later during the course.

### **Student Responsibilities**

It is expected that you are the owner of your success in this course, including ensuring you understand the expectations, timelines, policies and learning objectives.

Expectations:

- Check LMS frequently.
- Start your homework assignments early.
- Check the feedback on homework assignments.

• Do your work independently: collaboration and participation in study groups is encouraged to improve your understanding and to develop problem-solving strategies. However, cheating and plagiarism will not be tolerated, i.e. do not copy other people's work.

• Communicate with the instructor when you are confused, or having difficulties with the course material / assignment / project.

## GRADING

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

#### Assessments

Assessment Type	Weight of Final Grade	Learning Objectives
Quizzes, prep & participation	40%	Critical understanding and problem using course concepts
Assignments	40%	
Final Project	20%	

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

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 <u>helpdesk@tamuc.edu</u>.

**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**

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

The syllabus/schedule are subject to change.

#### Interaction with Instructor Statement

### **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

#### **Course Specific Procedures/Policies**

#### 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 <u>Student Guidebook</u>. <u>http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/</u> <u>studentGuidebook.aspx</u>

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

#### **TAMUC** Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedures 13.99.99.R0.01</u> <u>http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx</u>

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

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Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/ rulesProcedures/documents/ 13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/ GraduateStudentAcademicDishonestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/ rulesProcedures/13students/undergraduates/ 13.99.99.R0.03UndergraduateAcademicDishonesty.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 Velma K. Waters Library Rm 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u> <u>http://www.tamuc.edu/campusLife/campusServices/</u> <u>studentDisabilityResourcesAndServices/</u>

### **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.

The syllabus/schedule are subject to change.

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 <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url: <u>http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/</u> 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 <u>www.tamuc.edu/</u> <u>counsel</u>

# Al use policy [Draft 2, May 25, 2023]

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

13.99.99.R0.10 Graduate Student Academic Dishonesty

**Department or Accrediting Agency Required Content** 

# **COURSE OUTLINE / CALENDAR**

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Tentati	ve Schedule	: CICS 340 - Fall	2024			
Week	Dates	Textbook	Meeting Details	Assignm ents	Due	Quizzes
1	8/18/2024	Chapter 1	Getting Started, Course Syllabus, Ch01	Lab 01		Q1: Chapter 1
2	8/25/2024	Chapter 2	Ch02 - Data Modeling	Lab 02	Lab 01 Due	Q2: Chapter 2
3	9/1/2024	Chapter 3	Ch03 - DBMS Concept	Lab 03	Lab 02 Due	Q3: Chapter 3
4	9/8/2024	Chapter 4	Ch04 -SQL - Data Retrieval: SQL	Lab 04	Lab 03 Due	Q4: Chapter 4
5	9/15/2024	,		Lab 05	Lab 04 Due	
6	9/22/2024	Chapter 5	Data Modeling: Introduction	Lab 06	Lab 05 Due	Q5: Chapter 5
7	9/29/2024	1		Lab 07	Lab 06 Due	1
8	10/6/2024	Chapter 6	Data Modeling: Additional Concepts		Lab 07 Due	Q6: Chapter 6
9	10/13/2024	1		Lab08		
10	10/20/2024	Chapter 7	Database Design: Logical		Lab08 Due	Q7: Chapter 7
11	10/27/2024	Chapter 8	Database Design: Physical	Lab 09		Q8: Chapter 8
12	11/3/2024	Chapter 10	Database Administration	Lab 10	Lab 09 Due	Q9: Chapter 10
13	11/10/2024		Database Control: Security, Backup, Recovery	Lab 11	Lab 10 Due	Q10: Chapter 11
14	11/17/2024		Client/Server and Distributed Databases	Lab 12	Lab 11 Due	Q11: Chapter 12
15	11/24/2025	Chapter 13 & 14	Data Warehouses and the Internet			Q12: Chapter 13
16	12/01/2024	Finals Week	Finals Week			
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