

CSCI 340 Introduction to Database

COURSE SYLLABUS: SPRING 2021

INSTRUCTOR INFORMATION

Instructor: Mutlu Mete, Ph.D., Associate Professor of Computer Science Office Location: Jour 218 Office Hours: TBA Office Phone: 903-886-5497 Office Fax: 903-886-5165 University Email Address: <u>Mutlu.Mete@tamuc.edu</u> Preferred Form of Communication: Email Communication Response Time: One business day

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Recommended Text

- 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

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.

Student Learning Outcomes (Should be measurable; observable; use action verbs) 1. Install, configure, and interact with a relational database management system;

- 2. Describe and apply the components of the relational database model to database design;
- 3. 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;
- 5. Comprehend then implement web database programming fundamentals by developing an application program interface (API) to access and maintain a relational database;
- 6. Learn and implement the principles and concepts of information integrity, security and confidentiality;

COURSE REQUIREMENTS

Minimal Technical Skills Needed

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

Instructional Methods

Online

Student Responsibilities or Tips for Success in the Course

"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). 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.

GRADING

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

GRADING POLICY:

A: 100%- 90% B: 89% - 80% C: 79% - 70% D: 69% - 60% F: 59 % - 0%

Assessments

Midterm(s)50% (2 x 25%)Assignments20%Final test30%

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: <u>https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_suppo</u> <u>rt.htm</u>

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 <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

Interaction with Instructor Statement

You can come to my office (JOUR218) at any time during office hours regarding any question about any topic, including the questions about this course. I can share my industry and research experiences with you. Other than face-to-face and classroom communications, the primary mode of asynchronous communication is email. My email address is <u>mutlu.mete@tamuc.edu</u>. 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 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 office number is 903-886-5497; 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

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 myLeoOnline communication system. Detailed information will be provided by the instructor. Students also should turn in their assignments through myLeoOnline portal. Each student is responsible for the content/instructions of email communications.

During the online tests, you will not be able to move backwards through pages. It means once you answer a question, you will not able to see it again. Instructor can use plagiarism software during the tests.

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>.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as px

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

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 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

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: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u>

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

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

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

Tentative Topics by Week

Week of	TOPIC
1/11/2021	Introduction to Database Systems
1/18/2021	Data Modeling
1/25/2021	Introduction to SQL
2/1/2021	Database Concepts
2/8/2021	Relational Model & Nested SQL
2/15/2021	Physical DB Design
2/22/2021	Test
3/1/2021	SQL, Database specific functions
3/8/2021	& SQL (Joins)
3/15/2021	Normalization
3/22/2021	Data Administration
3/29/2021	HTML, DB connections
4/5/2021	Web-Based DB Operations
4/12/2021	Security, Backup, Test
4/19/2021	Recovery, Concurrency
4/26/2021	Final Test

~~HAVE A VERY SUCCESSFUL SEMESTER~~