

CSCI-340 61E

Introduction to Database

COURSE SYLLABUS: Fall 2020

INSTRUCTOR INFORMATION

Instructor: Dr. Srujan Kotikela, Assistant Professor

Office Location: ACB1 306

Office Hours: By email and appointment only

Office Phone: 979-317-3429

Office Fax: N/A

University Email Address: srujan.kotikela@tamuc.edu

Preferred Form of Communication: email (The Email Subject Is: CSCI340-blahblah)

Communication Response Time: 24 hours or sooner

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Required Textbook:

Fundamentals of Database Management Systems 2ed. by Mark L. Gillenson (John Wiley & Sons, Inc.) ISBN-10: 1590280296. ISBN-13: 9780470624708

Optional Reference:

Murach, Joel. Murach's MySQL 2ed. Mike Murach & Associates, 2015. ISBN: 978-1-890774-82-0.

Course Description

Data Modeling; relational data retrieval using SQL; logical database design; physical database design; data administration, database administration, and data dictionaries; database security, backup and recovery; database and the internet.

The syllabus/schedule are subject to change.

Student Learning Outcomes

- 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 tables.
- 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

Ability to use the Internet browser to access MyLeo Learning Management System (LMS), Zoom, Microsoft Word and PowerPoint, and PDF reader.

Instructional Methods

This is a face-to-face course with heavy use of the MyLeo (D2L) Learning Management System (LMS) and remote learning component.

Student Responsibilities or Tips for Success in the Course

Students are encouraged to attend all classes and regularly visit the LMS to stay up-todate with the course progress.

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

<u>Assessments</u>: Grades will be calculated based one midterm, quizzes and participation, programming assignments/projects and a final project. Your final grade will be the *sum* of the percentages you earned in each category as shown below:

Quizzes/participation: 10%
Midterm: 30%
Projects/Programming assignments: 35%
Final Project: 25%

<u>Outcome Assessments</u>: There will be a project for every chapter, quizzes, exams, and a final project. These methods will be used to assess learning objectives (LO).

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

Zoom Technical Requirements:

https://support.zoom.us/hc/en-us/articles/201362023-System-requirements-for-Windows-macOS-and-Linux

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

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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

See first page above.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

<u>Cheating:</u> Don't do it! I will not tolerate neither cheating nor plagiarism. I am a very nice guy, but I have a very short temper when it comes to these. Copying assignments, submitting your friends or classmates' assignments as your own, wandering eyes on tests or quizzes are just a few examples. The consequences for these kinds of activities could be severe with lower limit being an "F" for the course and the upper limit being a referral to the Dean of students for a possible dismissal from A&M-Commerce (See specific policies below).

<u>Midterm and Quiz Makeup:</u> I will give NO makeup midterm/quizzes. However, if you have a valid reason for missing a midterm (validity is determined by me) given before the midterm, I will replace the missed midterm with your final project grade (i.e. your final project will count both as a midterm and final project).

MyLeo for communication: We will extensively utilize this Learning Management System (LMS) known as MyLeo (leoportal.tamuc.edu) for a lot of class related activities, and especially for communication. So check your e-mail and LMS often (preferably twice a day).

<u>Use of electronic device during class:</u> Use of any electronic device (not sanctioned by me) is prohibited. Those who are caught doing this will be asked to leave the class. No discussion.

<u>Academic Integrity:</u> The University's policy on academic integrity, found here, applies in this course: All violations of this policy are considered serious offenses and may result in failure of the assignment or the course.

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

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

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 $\underline{http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as}\\ \underline{px}$

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>.

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:

<u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u>

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

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ

ices/

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:

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

Drop Deadline: TBA

Holidays: Thanksgiving - 11/25 through 11/27

Last class Day: 12/4 through 12/06

Final Exam Week: 12/5 through 12/11

Week #	Topics	Chapter	Activity
		Readings	
1	Review class Policy and Syllabus	TBA	TBA
2	Data Modeling	TBA	Lecture/Proj1
3	Data Modeling	TBA	Lecture/Proj2
4	Relational Data Retrieval: SQL	TBA	Lecture/Proj3
5	Relational Data Retrieval: SQL	TBA	Lecture/Proj4/Q1
6	Logical Database Design	TBA	Lecture/Proj5
7	Logical Database Design	TBA	Lecture/Proj6
8	Midterm	TBA	Midterm Exam
9	Physical Database Design	TBA	Lecture/Proj7
10	Physical Database Design	TBA	Lecture/Proj8
11	Data Administration, Database	TBA	Lecture/Proj9
	Administration, and Data Dictionaries		-
12	Data Administration, Database	TBA	Lecture/Proj10/Q2
	Administration, and Data Dictionaries		
13	Database Security, Backup and	TBA	Lecture/Proj11
	Recovery		
14	Database Security, Backup and	TBA	Lecture/Proj12
	Recovery		
15	Project Presentations	N/A	
16	Final Exam	N/A	Final Exam

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Coronavirus Safety Measures

Students must observe the following practices while participating in face-to-face courses and course-related activities (office hours, transitioning to and between classes, study spaces, academic services, etc.)

Self-monitoring

Students should follow CDC recommendations for self-monitoring. Students who have a fever or exhibit symptoms of COVID-19 should participate in class remotely and should not participate in face-to-face instruction.

Face Coverings

Face coverings (cloth face covering, surgical mask, neck gaiters, etc.) must be properly worn in all common areas including classrooms, lobbies and hallways, and offices.

- To attend a face-to-face class, students must wear a face covering (or a face shield if they have an exemption letter). If a student refuses to wear a face covering, the instructor should ask the student to leave and join the class remotely. If the student does not leave the class, the faculty member should report the incident to Carlos Pinkerton (cpinkerton@rellis.tamus.edu). Carlos will follow-up with the student and initiate the student conduct process. Additionally, the faculty member may choose to teach that day's class remotely for all students.
- Students who refuse to wear face coverings face possible sanctions for violations including failure to comply with university official, failure to comply with federal, state and local laws, disorderly conduct, and disruptive activity.

Physical Distancing

Physical distancing must be maintained between students, instructors, and others in course and course-related activities.

- Students must follow marked pathways for entering and exiting classrooms.
 Leave classrooms promptly after course activities have concluded. Do not congregate in hallways and maintain 6-foot physical distancing when waiting to enter classrooms and other instructional spaces.
- Students must practice physical distancing while outdoors. If you can maintain 6foot physical distancing while outdoors, masks are optional.

Quarantine or other reasons to work remotely

Students required to quarantine must participate in courses and course-related activities remotely and **must not attend face-to-face course activities**. Students should notify their instructors of the quarantine requirement. Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities.

Remote Learning

Every face-to-face class will have a remote learning option. All details for the remote learning option will be updated in D2L and announced in the class.