

BUSA 526 – Database Management

Fall 2021

INSTRUCTOR INFORMATION

Instructor: Office Location: Office Hours: Office Phone: Office Fax: University Email Address: Preferred Form of Communication: Communication Response Time:

Son Bui virtual office - <u>connect.tamuc.edu/virtual-office</u> 11:00 am – 1:00 pm Tue, Wed, and Thu 903-886-5692 903-886-5693 <u>son.bui@tamuc.edu</u> email within 24 hours

COURSE INFORMATION

ISBN: 978- 0134858333 - SQL Queries for Mere Mortals: A Hands-On Guide to Data Manipulation in SQL (4th Edition).

Access to MySQL WorkBench. Instructions to access to MySQL WorkBench can be found in D2L.

Course Description

In this course, you will gain both an understanding of and the ability to work with databases. They are the fundamental tool of business in today's marketplace. You will also gain facility in using the tools provide in the MySQL to analyze data to provide answers to business questions.

Learning Outcomes

This course provides an introduction to the core concepts in data and information management. It is centered around the core skills of identifying organizational information requirements, modeling them using conceptual data modeling techniques, converting the conceptual data models into relational data models and verifying its structural characteristics with normalization techniques, and implementing and utilizing a relational database. Building on the transactional database understanding, the course provides an introduction to data and information management technologies that provide decision support capabilities under the broad business intelligence umbrella.

Student Learning Outcomes

Upon successful completion of the course, student should be able to:

- 1. Understand and be able to use the entity-relationship diagram to create database prototypes.
- 2. Be able to use SQL to implement database prototypes in a database management system such as MySQL.
- 3. Be able to use SQL to retrieve data, and perform simple data analysis in a database management system

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students should have learned Microsoft Word, Excel and PowerPoint.

Instructional Methods

Each week learning materials are opened on Monday at 12:00 am in D2L. Weekly lecture will be conducted in class based on class schedule. Students are required to participate in class discussion, and complete multiple assignments and exams throughout the whole semester.

Student Responsibilities/Tips for Success in the Course

- 1. Students are expected to:
 - a. Read text assignments as scheduled
 - b. Watch tutorial videos as scheduled
 - c. Work the homework assignments independently. Submit the homework assignments in the appropriate D2L assignment submission folder.
- 2. This syllabus is tentative for the semester. Certain topics maybe stressed more or less than indicated in schedule. Depend on class progress, certain topics may be omitted or added.

- 3. Homework assignments are graded bi-weekly. Many assignment solutions are not posted in D2L. Instead, detail assignment walkthroughs are provided during class lecture. It is highly recommended for students to attend the class lecture to ask questions.
- 4. Feel free to ask questions through email or during class lecture. You can ask any questions related to course topics, group projects, and exams and I try to answer them within few hours (maximum 24 hours). In class lecture, you can also try to answer others' questions. But you are expected to maintain etiquette and decency in your responses.
- 5. Behavior: "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 Book). During your collaboration with me and your fellow students online or in class, professionalism and respect will be expected. I encourage you to assist one another, but always respect one another's opinion and communicate professionally with each other and with me.
- Any form of cheating copying, sharing files, submitting the work of another as your own – is not permitted. Students who participate (as givers/receivers) in any form of cheating will fail the course.
- 7. Attendance Policy: regular attendance will be taken. There is no penalty for absence but opportunity for any grace points based on class participation will lost if there is too much absence. You are yourself responsible for getting class notes from friends for missed classes due to unavoidable circumstances. However, exams have corresponding due dates which will not be extended for your personal excuses.

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

Assignments/Projects	Percentage
Application Assignment	40%
Midterm Exam	30%
Final Exam	30%

Assessments

Exams: There will be 2 exams during the semester. The exams will be counted as 30% of your final grade. These exams will be open-book, open-note, and open-internet. However, they are not open-neighbor, and you can't discuss with your friends including people who are and aren't taking the class. <u>No late exams will be accepted.</u>

Application Assignment: You will have 9 assignments that help you to master materials in class. Each assignment will be graded separately, but only the best 8 assignment scores will be used to calculate for your final grade. These application assignments will be counted as 40% of your final grade. Late assignments are highly discouraged. For each day an assignment is late it will be deducted 10%. Under NO circumstances will I accept an assignment more than a week late.

<u>Certification:</u> In a competitive environment, businesses are always looking for certified and skilled professionals. There is no better way to show this than to earn a new wellregarded certification. As such, the class will encourage you to take the following certifications for future career. Please keep in mind that earning a certification is totally optional activities. It is not necessary to get a good grade for the class. The class might cover a certain portion of the exam, but it rests in your hand to prepare thoroughly for the exam. All the learning materials and exam fees are your responsibility. Please do not email me to ask for learning materials. Copy of your certification must be emailed before the last day of class to earn credits:

- Microsoft Certified Solutions Associate (MCSA) SQL 2016 Database Development: automatically pass the class with an 'A' grade
- Tableau Desktop Specialist: bonus 5% toward final grade

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: <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

YouSeeU Virtual Classroom Requirements: <u>https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-</u> <u>Requirements</u>

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

I generally response to students' questions in a few hours (maximum 24 hours), and feedback on assignments is provided bi-weekly.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Missed homework assignment will result in 0 points while missing the exams will results in grade 'F'. There will be no make-up exam, or make-up assignment. No late exam will be accepted. Late assignments are highly discouraged. For each day an assignment is late it will be deducted 10%. Under <u>NO</u> circumstances will I accept an assignment more than a week late.

Regular attendance will be taken. There is no penalty for absence but opportunity for any grace points based on class participation will lost if there is too much absence. You are yourself responsible for getting class notes from friends for missed classes due to unavoidable circumstances. However, exams have corresponding due dates which will not be extended for your personal excuses.

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/studentGuidebook.as</u> <u>px</u>

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:

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> <u>http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ</u> <u>ices/</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. 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.

Week	Торіс	Reading Assignment	Homework Assignment
WEEK 1: Aug 30 th	Review Syllabus		 Submit Academic Dishonesty Policy
WEEK 2: Sep 6 th	 PP #1: Database Management Overview and Introductory Entity Relationship Diagram In-class lab assignment (not grading) 	 Reading Articles in D2L 	 HW #1 – Creating Entity Relationship Diagram
WEEK 3: Sep 13 th	PP #2: Relational Database Part 1	 Ch. 1 & 2 Reading Articles in D2L 	
WEEK 4: Sep 20 th	 PP #2: Relational Database Part 2 In-class lab assignment (not grading) 	• Ch. 1 & 2	HW #2 – Converting ERD to Relational Database

COURSE OUTLINE

[T		1
		Reading	
		Articles in	
		D2L	
WEEK 5:	PP #3: Physical Design	• Ch. 15, 16,	• HW #3 – Creating
Sep 27 st	PP #4: Implementation	& 17	Database and Modifying Data
WEEK 6:	PP #5: Join Multiple Tables	• Ch. 4, 5, 6,	• HW #4 – Joining Tables
Oct 4 th	 In-class lab assignment (not grading) 	7, 8, & 9	
WEEK 7:	PP #6: Subqueries	• Ch. 11	HW #5 – Creating
Oct 11 th	 In-class lab assignment (not grading) 		Subqueries
WEEK 8: Oct 18 th	Midterm Exam		
WEEK 9:	 PP #7: Simple Totals and 	• Ch. 10, 12,	• HW #6 – Grouping Data
Oct 26 th	Grouping Data	13 & 14	
	PP #8: Filtering Group Data		
	In-class lab assignment (not		
	grading)	• •••••	
WEEK 10:	PP #9: View and Conditional	• Ch. 18	• HW #7 – View and
Nov 1 st	Testing		Conditional Testing
	In-class lab assignment (not grading)		
WEEK 11:	 PP #10: Advanced Topic Part 1 	• Ch. 19	• HW #8 – Advanced
Nov 8 th	 In-class lab assignment (not 		Topic Part 1
	grading)		
WEEK 12:	PP #11: Advanced Topic Part 2	Reading	HW #9 – Advanced
Nov 15 th	 In-class lab assignment (not 	Articles in	Topic Part 2
	grading)	D2L	
WEEK 13:	Thanksgiving – No Class		
Nov 22 th			
WEEK 14:	• PP #12: Advanced Topic Part 3	 Reading 	
Nov 29 th	 In-class lab assignment (not 	Articles in	
	grading)	D2L	
WEEK 15:	Final Exam		
Dec 6 th			