



# BUSA 526 – Database Management

FALL -2021

## INSTRUCTOR INFORMATION

**Instructor:** DR. ZAKI MALIK

**Office Location:** BA 314C

**Office Hours:** By appointment

**University Email Address:** [zaki.malik@tamuc.edu](mailto:zaki.malik@tamuc.edu)

**Preferred Form of Communication:** Email. Please use BUSA-526 in the subject line of the email. This is the fastest way to reach me.

**Communication Response Time:** Within 48 hrs. However, it will usually be much faster than this.

## COURSE INFORMATION

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

#### ***Textbook(s) Required***

- **ISBN:** 978-0321992475 - SQL Queries for Mere Mortals: A Hands-On Guide to Data Manipulation in SQL (3rd Edition preferred, but other editions can do too).

#### ***Software Required***

- MySQL and MySQL Workbench. Instructions to download and install the software Workbench can be found in D2L.
- Students are expected and responsible to make sure the software is installed and working in the first week of the semester!

*The syllabus/schedule are subject to change.*

### ***Optional Texts and/or Materials***

- SQL is implementation-oriented. Meaning, the more you write SQL, the better you get at it. Students are encouraged to consult other online sources for learning and practicing SQL.

### ***Course Description***

In this course, you will gain both an understanding of, and the ability to work with databases.

### ***Learning Objectives***

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.

### ***Student Learning Outcomes***

The student will:

1. Understand and be able to use the entity-relationship diagrams 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***

- Be able to take screenshots.
- Be able to use Microsoft Word and PowerPoint, using presentation and graphics programs, etc.
- Be able to follow instructions in installing the required software.
- Be able to troubleshoot software problems (e.g., by consulting online sources using Google etc).

### ***Instructional Methods***

The course is delivered entirely through D2L. The main mode of instruction is through book, instructor slides readings, and implementing the instructor provided “developer guides”. When a topic requires special attention, the instructor may record a video to explain. Mostly however, the developer guides are written to be self-explanatory, and explain the intricacies of the topics.

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## ***Student Responsibilities or Tips for Success in the Course***

Students are responsible for regularly logging into the course website, keep up the pace with the weekly readings of the book and slides, understand and implement the developer guides on their MySQL installations.

## **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***

- **Exams:** There will be 2 exams during the semester. Each exam will count 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.
- **Application Assignments:** You will have regular assignments (almost every topic) that help you to master materials in class. These application assignments will count as 40% of your final grade.

<b>Assignments/Projects</b>	<b>Percentage</b>
<b>Application Assignments</b>	40%
<b>Mid Term Exam</b>	30%
<b>Final Exam</b>	30%

## **TECHNOLOGY REQUIREMENTS**

- To fully participate in online courses you will need to use a current Flash enabled internet browser. For PC and Mac users the suggested browser is Mozilla Firefox.
- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:

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- 2GB of RAM, 4 GB or more preferred, with ample Hard disk space (>5-10GB)
- 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.
- Run a browser check through the Pearson LearningStudio Technical Requirements website. [Browser Check http://help.D2L.com/LS\\_Tech\\_Req\\_WebHelp/en-us/#LS\\_Technical\\_Requirements.htm#Browset](http://help.D2L.com/LS_Tech_Req_WebHelp/en-us/#LS_Technical_Requirements.htm#Browset)

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.

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- For additional information about system requirements, please see: [System Requirements for LearningStudio](https://secure.D2L.com/tamuc/index.learn?action=technical)  
<https://secure.D2L.com/tamuc/index.learn?action=technical>

## **ACCESS AND NAVIGATION**

### **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.

### **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>

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## COMMUNICATION AND SUPPORT

- If you ask me questions by emails, I will reply within 48 hours. However, I usually answer them much faster than this.
- If you have questions about software operations, please be sure to include the screenshots of the questions in the emails.
- All assignment due dates, project deadlines, and exam time are central time in the United States.

## COURSE AND UNIVERSITY POLICIES

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

The class schedule will be provided and updated in D2L. A tentative topics list with each week is listed at the end of this document. Each assignment will be listed with its due date. Since assignments make up the majority of your grade, you should make every effort to complete them on time. Late assignments are **highly** discouraged. For each day an assignment is late it will be deducted 20%. Under **NO** circumstances will I accept an assignment more than FOUR DAYS late.

### **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/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>

#### ***TAMUC Attendance***

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

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<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>

### ***ADA Statement***

#### **Students with Disabilities**

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 132

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

Fax (903) 468-8148

Email: [Rebecca.Tuerk@tamuc.edu](mailto:Rebecca.Tuerk@tamuc.edu)

<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.

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## ***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 [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

<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.

## **TENTATIVE COURSE OUTLINE**

Due to the shorter semester (FLEX), some weeks will be condensed.

<b>Week</b>	<b>Topic(s)</b>	<b>Chapter</b>
1	Course Introduction Database software installation	
2	What is Relational? ER Diagrams Ensuring Your Database Structure Is Sound	Chapter 1, 2 Slides
3	Enhanced ER Diagrams	Slides
4	ER to Relational Model	Slides
5	Updating, Inserting, and Deleting Sets of Data	Chapter 15 - 17
6, 7	Create a Simple Query	Chapter 4
6, 7	Getting More Than Simple Columns	Chapter 5
6, 7	Filtering Your Data	Chapter 6
<b>8</b>	<b>Review &amp; E X A M 1</b>	<b>Chapters Covered</b>
9	Thinking in Sets INNER / OUTER JOIN and UNION	Chapter 7 - 10
10, 11	Subqueries	Chapter 11
12	Simple Totals, Grouping Data	Chapter 12 - 14
13	Views and Condition Testing	Chapter 18 - 19
14	SQL Practice	Slides
<b>15</b>	<b>Review &amp; E X A M 2</b>	<b>Comprehensive</b>

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