

**Department of Computer Science & Information Systems** 

# CSCI 340 01W – Introduction to Database Online

#### **Instructor Information:**

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	A&M-Commerce MyLeoonline (myleoonline.tamuc.edu)

Office Hours: Monday 12:00 PM – 03:00 PM, Tuesday 11:00 AM – 02:00 PM Other times: By appointment

Graduate Teaching and Research Assistants:

TBA:	Graduate Research Assistant,
Selim Sarac:	Graduate Teaching Assistant,

#### **Course Information:**

Introduction to Database: 3 hrs. Mode of delivery will be online. Weekly modules, opening exercises, mastery exercises, projects/assignments will make up the contents. Prerequisites: CSCI233 or CSCI270. This course offers online lecture, laboratory, and interaction to provide a foundation in data management concepts and database systems. It includes representing information with the relational database model, manipulating data with an interactive query language (SQL) and database programming (PHP), database development including internet applications, and database security, integrity and privacy issues...

Course Objectives/Learning Outcomes:

Topics covered in this course include the following:

- Data Modeling
- Relational Data Retrieval: SQL
- Logical Database Design
- Physical Database Design
- Data Administration, Database Administration, and Data Dictionaries
- Database Security, Backup and Recovery
- Database and the Internet

Upon completion of the course, the student will be able to:

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- Install, configure, and interact with a relational database management system.
- Describe, define and apply the major components of the relational database model to database design.
- Learn and apply the Structured Query Language (SQL) for database definition and manipulation.
- 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.
- 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.
- Learn and implement the principles and concepts of information integrity, security and confidentiality
- Apply ethical computing concepts and practices to database design and implementation. \* These outcomes will be measured by Final project, exam, homework, and lab assignment results

Textbook: Required Text: Fundamentals of Database Management Systems 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 Requirements:**

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

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

Grading scales:

А	90-100
В	80-89
С	70-79
D	60-69
F	Below 60

Projects/Programming Assignments:

All projects/programming assignments will be available on the class webpage or MyLeo LMS.

• Point value will vary depending on the level of difficulty.

- All assignments/projects must be "submitted" *no later than the cutoff time* (cutoff time online or beginning of the class on the due date). Late assignments and programs (when given) that don't compile or work as expected receive NO (zero) credit. Please be aware of the due date/time and submit ALL assignments in a timely manner.
- All submitted assignments should be "backed up" in both soft copy (electronic version) on your PC's hard drive or other media such as a USB flash drive (*labeled with your name and class period*) and hard copy (printout). This backup will be requested in the event errors occur during the "submit" process.

<u>Homework:</u> relevant homework will be given periodically to help you prepare for programming assignments/projects. This is in addition to all the programming assignments/projects, which are also considered as homework. An out-of-class preparation and successful completion of these will determine how well you do in the course.

## Quizzes:

Quizzes can be given on any day and at my discretion (usually when the attendance is very low – this is to encourage attendance) or be made available online during a given window and cannot be accessed once that window closes. No makeup on quizzes regardless of the circumstances.

#### Midterm and Final Project:

The Midterm will cover lecture notes, assignments and other material up to the week before Midterm is given. No cheating on Midterm and quizzes (see cheating below) will be tolerated. Final Project will be assigned early. It is meant to test your mastery of the course's key concepts learned during the semester, and the specifications (specs) will reflect that. It is my expectation that you will comply with the A&M-Commerce's Academic Honesty policy, as listed in the University's Undergraduate/Graduate Bulletin.

#### **Technology Requirements:**

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

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- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

#### **Desktop Support**

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google <sup>®</sup> Chrome <sup>™</sup>	Latest	N/A
Apple® Safari®	Latest	N/A

# **Tablet and Mobile Support**

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or <b>point</b> release of that major version) and the previous major version of iOS (the latest minor or <b>point</b> release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

• You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:

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- o 512 MB of RAM, 1 GB or more preferred
- 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: <u>JAVA web site</u> <u>http://www.java.com/en/download/manual.jsp</u>
- Current anti-virus software must be installed and kept up to date.

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:
  - o Adobe Reader https://get.adobe.com/reader/
  - o Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
  - o Adobe Shockwave Player https://get.adobe.com/shockwave/
  - o <u>Apple Quick Time</u> <u>http://www.apple.com/quicktime/download/</u>
- 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.

# 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 Brightspace Support

# **Need Help?**

## **Student 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 or click the **Live Chat** or click on the words "click here" to submit an issue via email.



## System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

## **Interaction with Instructor Statement**

Communication is an important component of the course. This means I will respond to any inquiry and within 24 hours and give feedbacks and assessment on assignments/projects within one week's time.

## **Course and University Procedures/Rules:**

<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 determine by me) given <u>before</u> 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).

<u>MyLeoonline for communication:</u> We will extensively utilize this Learning Management System (LMS) known as MyLeoonline or D2L (myleoonline.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.

Academic Integrity:

The University's policy on academic integrity, found <u>here</u>, 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 <u>http://www.albion.com/netiquette/corerules.html</u>

# TAMUC Attendance:

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

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13studenta cademic/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

 $\label{eq:http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf$ 

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 Website: <u>Office of Student Disability</u> <u>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 document and/or consult your event organizer.</u>

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyO fEmployeesAndStudents/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 Calendar**

Drop Deadline: TBA

Labor Day: Monday September 3, 2018 – classes do not meet

Thanksgiving Holidays: Thursday November 22 – Fri. November 23, 2018 – classes do not meet

Last class Day: Friday December 7, 2018

Final Exam Week: Saturday December 8 - Saturday May 15, 2018

Final Exam: TBA

Fall Commencements: Friday Dec. 14 (Graduates) and Saturday Dec. 15, 2018 (Undergraduates)

Week of	Topics	Chapter Readings	Activity
8/27	Review Class Policy and Syllabus	TBA	TBA
9/3	Module 1: Data Modeling	TBA	Lecture/Proj1
9/10	Module 2: Data Modeling	TBA	Lecture/proj2
9/17	Module 3: Relational Data Retrieval: SQL	TBA	Lecture/Proj3
9/24	Module 4: Relational Data Retrieval: SQL	TBA	Lecture/Proj4
10/1	Module 5: Logical Database Design	TBA	Lecture/Proj5
10/8	Module 6: Logical Database Design	TBA	Lecture/Pro6/Q1
10/15	Module 7: Physical Database Design	TBA	Lecture/Proj7
10/22	Module 8: Physical Database Design	TBA	Lecture/Proj8
10/29	Midterm	TBA	Midterm Exam
11/5	Module 9: Data Administration, Database Administration, and Data Dictionaries	TBA	Lecture/Proj9/Q2
11/12	Module 10: Database Security, Backup and Recovery	TBA	Lecture/Proj10
11/19	Module 11: Database Security, Backup and Recovery	TBA	Lecture/Proj11
11/26	Module 12: Database and the Internet	TBA	Lecture/Proj12
12/3	Module 13: Database and the Internet	TBA	Lecture/Proj13
12/10	Final Exam	N/A	Final Project

\*This syllabus is subject to change...