CSCI 340: INTRODUCTION TO DATABASE

COURSE SYLLABUS : Fall 2024

INSTRUCTOR INFORMATION

Instructor: Thomas L. Brown, Adjunct Professor
Office Location: Journalism 202
Office Hours: Tue & Thu 12:00 -12:30pm + appointments
Office Phone: 903.886.5409
Office Fax: 903.886.5404
University Email Address: tom.brown@tamuc.edu
Preferred Form of Communication: email; and http://csci.website
Communication Response Time: next class day (or before)

COURSE INFORMATION

Reference:
   https://www.w3schools.com/sql/default.asp

Other Recommended Materials
   A usb/flash drive to store files and documents

Course Description

This course offers inPerson and online 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), database development, and database security, integrity and privacy issues. The prerequisite is COSC 2336 or CSCI 233

Student Learning Outcomes*:
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, and recursive relationships;
5. Define, develop and process single entity, 1:1, 1:M, and M:M database tables;
6. Learn and implement the principles and concepts of information integrity, security and confidentiality;
7. Apply ethical computing concepts and practices to database design and development;
* as measured by graded exercises and lab assignments

TECHNOLOGY REQUIREMENTS

Note the Following university requirements:
    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.
    You will need regular access to a computer with a broadband Internet connection. The
    minimum computer requirements are:
       512MB 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
       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:
       http://www.java.com/en/download/manual.jsp

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.

For enhanced web browsing you will need some additional free software (plug-ins). Ensure
    that you download the free versions of the following software:
       Adobe Reader https://get.adobe.com/reader/
       Adobe Flash Player *(version 17 or later)* https://get.adobe.com/flashplayer/
       Adobe Shockwave Player   https://get.adobe.com/shockwave/
       Apple Quick Time   http://www.apple.com/quicktime/download/

At a minimum (for some A&M courses), you must have Microsoft Office 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.

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 use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COURSE REQUIREMENTS

Minimal Technical Skills Needed:
   Students enrolling in this course should have mastered computer essentials including the use of a text editor, a graphical user interface, and a common web browser(e.g. Chrome).

   Also expected is mastery of an algorithmic computer programming language such as C++ or Python and basic data structures. If a personal computer is preferred rather than a laboratory computer, it is expected that the student can download, install and configure software. [Note that it is not likely that "smart phone" is capable of running the MySQL database manager.]

Instructional Methods:
   This course includes online tutorials, assigned reading from language references, and both lecture and laboratory activities for experience in database development and manipulation.

Student Responsibilities or Tips for Success:
   It is expected that the student will regularly log into the course website (http://csci.website), read chapter assignments, complete computing exercises and inClass quizzes on the announced dates.

GRADING & ASSESSMENTS

Final grades in this course will be based upon points earned on assignments , and final exam. There will be 300 possible points to earn on these graded activities. A point total in the range 270 to 300 will earn the grade of "A", 240 to 269 a "B", 210-239 a "C" and so on. College policy should be followed to obtain a grade of X".

COURSE AND UNIVERSITY PROCEDURES /POLICIES

Course Specific Procedures/Policies

1. Assigned Readings: The student is expected to read assignments to prepare for scheduled discussions of the material. The student is also expected to access online course materials to obtain assignments and related materials.
2. Participation: The student is expected to interact with the course professor and regularly access the course web site and LeoMail. Regular participation should ensure that expectations are understood, and give feedback to monitor and assess progress.
3. Graded activities: The student is expected to complete each graded activity at the scheduled time. Late submissions will not be accepted. However, should one of

these activities be missed, the grade for the next activity of the same type will be used for both.
4. **Intellectual Honesty:** The discovery of plagiarism (example: copying from another's lab solution) will result in a grade of zero on a particular lab or other individually graded activity. A subsequent breach of this policy mandates a grade of "F" for the course.

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. (**Student Guidebook http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx**).

Students should also consult the rules of Netiquette for more information regarding how to interact in an online forum: (see **http://ww.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.
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

The University's Pandemic Response

"A&M-Commerce requires the use of face-coverings in all instructional and research classrooms/laboratories. Exceptions may be made by faculty where warranted. Faculty have management over their classrooms. Students not using face-coverings can be required to leave class. Repetitive refusal to comply can be reported to the Office of Students' Rights and Responsibilitiesas as a violation of the student Code of Conduct."

"Students should not attend class when ill or after exposure to anyone with a communicable illness. Share such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.

"The counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment by calling 903-886-5145. For more information, please visit www.tamuc.edu/counsel" .

CSci 340.01B COURSE OUTLINE / CALENDAR

Week	Study Topic/Activity	
1	An introduction to databases and SQL	Tuesday/Thursday 12:30
2	Using SQL development tools	"
3	Retrieving data from a single table	"
4	Retrieving data from multiple tables	"
5	Inserting, updating and deleting data	"
6	Coding summary queries	"
7	Coding subqueries	"
8	Working with data types	"
9	Using functions	"
10	Designing a database	"
11	Creating databses, tables and indexes	"
12	Creating views	"
13	Database administration	"
14	Database security	"
15	Database backup and restore	"
16	Final Exam:	Thursday December 12th, 10:30 am