Thomas L. Brown **Office: Jour 230**
conference: Tue & Thu 10:30 in BA 338 **Phone: 903.886.5409**

CS 340: Introduction to Database

Course Description

This course offers lecture, laboratory, 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) and database programming(PHP), database development including internet applications, and database security, integrity and privacy issues.

Audience

Students planning to enroll for this course should have mastered the fundamentals of programming and basic data structures.

Student Learning Outcomes*

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 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;
Define, develop and process single entity, 1:1, 1:M, and M:M database tables;
Learn 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.
*** as measured by exam and lab assignment results**

References and Materials

Murach, Joel. Murach's MySQL 2ed. Mike Murach & Associates, 2015. ISBN: 978-1-890774-82-0.
MySQL database software and associated documentation is available--see the FAQ: https://www.apachefriends.org/download_success.html. Also, get a "zip" file for a portable implementation--so for usb/flash drive users link to http://bit.ly/14idYDv)

Measurement and Evaluation:

Grades will be based upon an evaluation of exam scores(300 pts) for those "face-to-face" participants, or on lab assignments and homework (300 pts) for online participants. A point total in the range of 270-300 will earn the grade "A", 240-269 a "B", 210-239 a "C" and so on. College policy must be followed to obtain an "X" (incomplete). Unless circumstances are beyond control, the student is expected to withdraw instead of delaying completion of the course.

COURSE POLICY and PROCEDURES

Activities and Requirements

1. **Assigned Readings: The student is expected to retrieve and read references related to assignments and class discussions.**

2. **Attendance: The "face-to-face" student is expected to attend orientation sessions, lectures, and scheduled examinations. Regular interaction should ensure that expectations are understood, and feedback provided for monitoring and assessing progress. The student is responsible for obtaining assignments and related materials from the course website.**

3. **Participation: The student is expected to monitor the course website, attend scheduled meetings, interact with the instructor, download, implement and test software and example code, submit lab solutions as required, and provide peer assistance with technical issues.**

4. **Homework, exams and lab assignments: These graded activities are based upon course objectives related to assigned readings, study questions, and class exercises. The student is expected to complete each activity by the due date or scheduled exam times. Should a deadline be missed, the next grade will be recorded for both.**

5. **Intellectual Honesty and Ethics: By departmental policy, the discovery of plagiarism (example: copying from another's exam or lab assignment) will result in a grade of "F" on that graded activity. A subsequent breach of this policy mandates a grade of "F" for the course. Also, the student is expected to follow university, departmental and class policies and procedures for information security and privacy.**

6. **Conduct: All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (see Student Handbook).**

7. **Special Accomodations: Students in need of accomodations for disabilities should contact the Director of Disability Resources and Services, Gee Library Room 132, Phone (903) 886-5150 or (903) 886-5835 or Fax (903) 468-8148 or email StudentDisabilityServices @tamuc.edu .**

8. **A&M-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.**

C.S. 340.0SE **Fall 2015**
Tue & Thu 11:00-12:15 **BA 338**

Schedule

Week	Topic/Activity	Chapter
1	Orientation and introduction to MySQL database management Software installation and configuration (MySQL)	*
2	Overview of database development Introduction to Relational databases and SQL	1 2
3	Retrieving(querying) from a single table Multiple relation(table) querys	3 4
4	Table creation and updating	5
5	Exam 1 for "face-to-face" (FTF) enrollees (Thu 1 Oct)	1-5
6	Summary querys Subquerys	6 7
7	Data types Functions	8 9
8	Database design	10
9	Managing database objects: tables, indexes, and views	11 12
10	Stored program development	13*
11	Exam 2 for FTF enrollees (Thur 12 Nov)	6-12
12	PHP & MySQL	*
13	Database administration Thanksgiving holiday (Thur 26 Nov)	17
14	User administration and security	18
15	Database backup and restore	19
16 *	Exam 3 (Tue 15 December, 10:30am) for FTF enrollees plus supplementary material	13, 17-19*