CSci 340 INTRODUCTION TO DATABASE

COURSE SYLLABUS SPRING 2017

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COURSE INFORMATION

Meeting Location and Time:
   BA 248 and Navarro College-BC322, Tuesday/Thursday 11:00 am
Materials:
   Textbook Required
      Murach, Joel. Murach's MySQL 2ed. Mike Murach & Associates, 2015. ISBN: 978-1-890774-82-0.
   Software Required
      MySQL database software and associated documentation is available at no charge-- see the FAQ: https://www.apachefriends.org/download_success.html. A "zip" file for a portable implementation is recommended rather than installing on a hard drive. For usb/flash drive implementation link to http://bit.ly/14idYDv) then extract files to the root directory (e.g. d:/). A folder named xampp will be created.

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.

Student Learning Outcomes(as measured by exam and lab project results)
   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(language) for database definition and manipulation;
   Utilize a database modeling techniques 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.

COURSE REQUIREMENTS

Minimum Technical Skills Needed

Students planning to enroll for this course should have mastered the fundamentals of programming and basic data structures. It is expected that the student can download, install and configure software to a usb flash drive.

Instructional Methods

This is a lecture and laboratory course with assigned readings, classroom presentations, online tutorials, exercises to be completed during class hours and programming assignments.

Student Responsibilities

The student is expected to:

a. read assignments to prepare for scheduled discussions of the material

b. access online course materials to obtain assignments and related materials

c. face-to-face students should attend all classes. Online students are expected to frequently interact with their instructor. Regular and punctual attendance/interaction should ensure that expectations are understood, and give feedback for monitoring and assessment of progress.

d. complete each graded activity at the scheduled time. Should one of these activities be missed, the grade for the next activity of the same type will be used for both.

GRADING

Grades will be based upon an evaluation of exams and lab project(s)(300 pts). 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.

POLICY, RULES & PROCEDURES

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

Nondiscrimination Notice: 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.

Campus Concealed Carry: 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 (http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/ rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf) and/or consult your event organizer). 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 OUTLINE / CALENDAR

Week	Topic/Activity	Chapter
1	Orientation and introduction to MySQL database management	*
	Software installation and configuration (MySQL)	
2	Overview of database development	1
	Introduction to Relational databases and SQL	2
3	Retrieving(querying) from a single table	3
	Multiple relation(table) querys	4
4	Table creation and updating	5
5	Exam 1 for ''face-to-face'' (FTF) enrollees (Thu)	1-5
6	Summary querys	6
	Subquerys	7
7	Data types	8
	Functions	9
8	Database design	10
9	Spring Break	--

10	Managing database objects: tables, indexes,	11
	and views	12
11	Exam 2 for FTF enrollees (Thu)	6-10
12	PHP & MySQL	*
13	Project presentations	--
14	Database administration	17
15	User administration and security	18
16	Database backup and restore	19
17	Exam 3 (Tue 9 May, 10:30am) for FTF enrollees	11-12, 17-19*
*	plus supplementary material	

TAMUC Attendance
For more information about the attendance policy please visit the attendance web page http://www.tamuc.edu/admisssions/registrar/generalinformation/attendance.aspx and see Procedure 13.99.99.R0.01
http://www.tamuc.edu/aboutUs/policiesProcedures/StandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity: By departmental policy, the discovery of plagiarism (example: copying from another's lab solution) will result in a grade of "F" on a particular lab or other individually graded activity. A subsequent breach of this policy mandates a grade of "F" for the course.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement
The instructors communication response time and feedback on assessments are stated clearly (on page 1).

COURSE AND UNIVERSITY PROCEDURES AND POLICIES

Course Specific Procedures/Policies
   The face-to-face student is expected to attend all classes. Online students are expected to frequently interact with their instructor. Regular and punctual attendance/interaction should ensure that expectations are understood, and give feedback for monitoring and assessment of progress. Regular and punctual attendance should ensure that expectations are understood, and give feedback to monitor and assess progress.
   The student is expected to complete each graded activity at the scheduled time. Should one of these activities be missed, the grade for the next activity of the same type will be used for both.

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 to the syllabus will be announced in advance of the effective date.

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." See the <u>Student Guidebook</u>:
    http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf

    The syllabus/schedule are subject to change.