Introduction to Database Systems COSC-3336.001
Department of Computing Sciences
Summer I 2016

A. COURSE INFORMATION
Course number/section: COSC-3336.001
Class meeting time: TR 03:00-05:30
Class location: IH-268
Course Website: bb9.tamucc.edu

B. INSTRUCTOR INFORMATION
Instructor: Mohammed Yassine Belkhouche
Office location: EN-316K
Office hours: MW 11:00 AM – 1:00 PM
T 11:00 AM -12:00 PM
Telephone: 825-3327
e-mail: mohammed.belkhouche@tamucc.edu
Appointments: By email

C. COURSE DESCRIPTION
A study of fundamental database management system concepts, terminology, and methodology for design, use, and implementation. Emphasis is on the relational model.

D. PREREQUISITES AND COREQUISITES
Prerequisites
COSC-2437

Corequisites
None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Optional Textbook(s) or Other References
None

Supplies
None

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT
By the end of this course, students should be able to:
1. Practice data modeling using the entity-relationship;
2. Develop database designs and Normalization of Database Tables;
3. Understand the use of SQL and use SQL syntax;
4. Use/understand stored procedures of MySQL;
5. Understand transaction management and concurrency control and distributed database management systems.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

The major instructional method is lecturing. The class also includes individual assignments and term project. Students are expected to present their term project.

H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (midterm and a final)</td>
<td>50</td>
</tr>
<tr>
<td>Assignments</td>
<td>20</td>
</tr>
<tr>
<td>Team Project</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes and class attendance</td>
<td>10</td>
</tr>
</tbody>
</table>

Grading scale: A: 100-90, B: 89-80, C: 79-70, D: 69-60, and F: 59-0.

Homework Assignments: Approximately 3-4 homework assignments will be given. No late homework assignments will be accepted. Partial credit will be given for incomplete assignments.

Quizzes: Approximately 2-3 pop-up quizzes (dropping one or two). Each quiz is about 10 minutes long.

Projects: One group project will be given. Partial credit will be given for incomplete projects.

Exams: The first exam will be given on Jun 23, 2016; the final exam will be given on July 21, 2016 from 3:00 – 5:30 am.
I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
<th>CHAPTER(S)</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Database Systems and Data Models&lt;br&gt;The Relational Database Model</td>
<td>Chapters 1, 2, 3</td>
<td>Assignment 1</td>
</tr>
<tr>
<td>2, 3</td>
<td>Entity Relationship (E-R) Modeling&lt;br&gt;Structured Query Language (SQL)</td>
<td>Chapter 4, 7</td>
<td>Assignment 2, 3</td>
</tr>
<tr>
<td>4</td>
<td>Exam 1&lt;br&gt;Normalisation of Database Tables</td>
<td>Chapter 5</td>
<td>Project</td>
</tr>
<tr>
<td>5</td>
<td>Advanced Data Modeling&lt;br&gt;Stored Procedures of MySQL</td>
<td>Chapter 6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Transaction Management and Concurrency Control&lt;br&gt;Distributed Database Management Systems</td>
<td>Chapter 10, 12</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Final Exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

**Course Syllabus:** We will meet for lecture on Tuesdays and Thursdays, when new material will be presented. We will follow the text generally, but non-text material may also be included in the lectures. The assignments and exams will be given during the class hours. You are responsible for all the material presented during the lecture.

**Exams:** Exams will cover all lecture and reading material discussed in the class. Exams must be taken on the hour they are scheduled.

**Missed Exam:** In the event, if you cannot attend the class to take the exam due to some emergency or some unavoidable situation (such as serious illness, death in the family, participation in university sports, religious observations, and so on) you must notify me as soon as possible before the exam and also you must validate your absence by providing me a document (e.g., with a letter from your doctor). Once your cause is validated a make-up exam will be given.

**Homework Assignments & Projects:** They will significantly be based on the material from the lectures and other material considered essential for the successful completion of this
course. They will be posted on the course web page or hard copies are handed out in the class during the lecture sessions. The submission details will be provided to you along with the assignment. All the homework assignments and projects are due at the beginning of the class on the due date. If the student is absent on the due date, it is the student's responsibility to see to it that the assignment is submitted on the designated date. No late homework assignments will be accepted. Late projects will be accepted. There is a penalty for late submissions. A project that is turned in after the class on the due date is considered one day late. There is a penalty for late submissions. 25% penalty for 1-2 days late. 50% penalty for 3-4 days late. 75% penalty for 5 days late. 100% penalty (i.e. no credit) if submitted after 5 days. If you have not completed your assignment by the due date, you should submit the work you have done for partial credit. No work will be accepted once the graded work has been returned or the solution has been disclosed to the class, except for unusual circumstances which the instructor feels reasonable. Note that any kind of hardware or software failure or machine unavailability in the lab does not merit an extension on the assignment. Diskettes upon which major examinations, assignments, projects or papers submitted may be retained by the instructor as a permanent record of the student's work.

Grading Error: All questions concerning a test score or grading of a returned test or assignment must be resolved within one week. It is always a good idea to keep all of your work until the end of the semester. In case of any recording errors or doubts, you may produce them for correction or verification.

Academic Honesty Policy: You are expected to avoid all forms of academic dishonesty as defined in the Catalog. In addition, students are expected to behave in an ethical manner in all class activities. If you feel uncertain about a particular activity, please speak to me BEFORE problems arise. Ethical behavior is a requirement for passing this course. All work submitted for grading must be the student's own work. Plagiarism will result in a score of 0 (zero) for the work or dismissal from the course and the Dean of Students office will be notified. No copying from another student's work, of any class, is allowed. It is the student's duty to allow no one to copy his or her work. Anyone found cheating and/or copying, in the exams or assignments, in the instructor's opinion, will receive an automatic F for the course.

Collaboration: If two or more students collaborate on an assignment, it should be notified on the assignment and each student should submit his or her solutions for grading. The grade obtained on such an assignment is the total points obtained for the assignment divided by the square of the number of people who collaborated on the assignment (e.g., if 3 people collaborate on an assignment and the grade for that assignment is 90 out of 100, then each student receives a grade of 90/3^2 = 10). If you do not notify me of such collaboration it will be treated as copied and action will be taken as discussed under the academic honesty policy.

Attendance: You must attend all classes and labs. While in class or lab attendance will not directly affect the grade, you are responsible for any materials covered or handed out or announcements made for the tests and assignments in your absence. Records of your attendance will be maintained and reported to the university. Students found missing classes without the instructor's permission will be automatically withdrawn from the course.
Absence from class: Students are responsible for all materials covered in class and assigned. Should a student be absent from class, it is his/her responsibility to get the notes, etc. for that missed class. More important, should there be assignments, it is the student responsibility to obtain such assignments. No excuse will be accepted for assignments not turned in because the student was absent when it was due.

Cell Phone Use: Please refrain from using electronic devices during class, as it is distracting to not only you, but also to your instructor and peers. Silence your phones and put them away so you are not tempted to stray off task.

Laptop Use
Laptops, Tablets cannot be used in the class.

Food in Class
No food in the class or labs.

Student Security Statement: Please read the Student Security Statement.

K. COLLEGE AND UNIVERSITY POLICIES

L. Academic Integrity (University)
It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior.
See Full University Policy at http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity

M. Classroom/Professional Behavior
You are expected to behave professionally in the classroom, labs and during office visits. Unprofessional behavior will be reported to the dean of students.

N. Deadline for Dropping a Course with a Grade of W (University)
The grade of W will be assigned to any student officially dropping a course by Friday, Jun 17, 2016. No student is eligible to receive a W without completing the official drop process by this deadline. Visit the Office of the University Registrar for the Course Drop Form that must be submitted. After Jun 17, 2016 a student will not be allowed to drop a course.

O. Grade Appeals (College of Science and Engineering)
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to
demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

P. Disability Services
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 believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

http://disabilityservices.tamucc.edu/

Q. Academic Advising
The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

R. OTHER INFORMATION
None

GENERAL DISCLAIMER
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.