Course Syllabi

1. *Course number and name*
   COSC 4385: Database Management Concepts

2. *Credits and contact hours*
   3 Credit Hours

3. *Instructor's or course coordinator's name*
   Instructor: Leonard Brown

4. *Textbook, title, author, and year*
   Database Systems: A Practical Approach to Design, Implementation, and Management, 6th edition, Thomas Connolly & Carolyn Begg, Pearson, 2015, ISBN 978-0-13-294326-0.

5. *Specific course information*
   a. *A brief description of the content of the course (catalog description)*
      This course covers information systems design and implementation within a database management system environment. Students will design and construct a system using database software to implement the logical design.

   b. *Prerequisites or co-requisites*
      COSC 2336

   c. *Indicate whether a required, elective, or selected elective course in the program*
      Required course for Computer Science

6. *Specific goals of the course*
   a. *Specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.*
      1. Describe the major components of a database management system and explain their role in distinguishing the database approach to the traditional approach of programming with files.
      2. Describe the modeling concepts and notation of the entity-relationship model or other similar conceptual model.

3. Describe the basic principles and define the fundamental terminology of the relational data model.
4. Use the relational algebra to manipulate information in a database
5. Use SQL to perform data definition and data manipulation
6. Implement a relational database from a design expressed using a conceptual model such as the entity relationship model.
7. Describe the benefits of decomposition and apply algorithms that normalize a 1NF relation into a set of 3NF and BCNF relation
8. Use SQL to perform database authorization

9. *Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course*
Course addresses Student Outcome(s): [a:4, b, c, i, j:7, k:6]

7. *Brief list of topics to be covered*
   - Database Architecture
   - The Entity-Relationship Model
   - Relational Algebra
   - Normalization
   - SQL
   - Database Security
   - Indexing and Hashing

COSC 4385 Database Management Concepts – Spring 2021

General Information
Instructor	Leonard Brown
Office Location	Soules 315.03
Office Hours	MWF 12:30 p.m. – 1:30 p.m. (or by appointment)
Phone	(903) 566-7403
Email	lbrown@uttyler.edu
Class Time/Location	MWF 10:10 a.m. – 11:05 p.m. / Soules 255

Exams: There will be three midterm exams and one final exam given for this class. All exams will be held in the class lecture room. The midterm exams will be during the regular class time. The *tentative* dates of the exams are:

Exam I	February 19, 2021
Exam II	March 22, 2021
Exam III	April 16, 2021
Final Exam	**(See University Schedule)**

You will be notified in advance of any change in the above dates.

Grading: There are several components to the course grade totaling 1000 points. The point distribution is as follows:

Exam I	100 points
Exam II	100 points
Exam III	100 points
Homework Assignments/Quizzes	250 points
Project	150 points
Final Examination	300 points

Course grades will be assigned based on the following scale.

900-1000	A
800-899	B
700-799	C
600-699	D
599 and below	F

Late Policies: All homework assignments are due at 11:59 p.m. on the date specified in the assignment. Assignments submitted after the due date (even if it is by one minute) are considered late. There is a 10% penalty for each day an assignment is late. Assignments will not be accepted after 5 days. *Note that this policy does not include the project. The project will have its own late policy.*

Plagiarism: Unless otherwise specified, all work submitted for a grade must be completed by yourself. You are not to submit another person's work and claim it as your own. Plagiarism will result in disciplinary actions. To spare yourself accusations of plagiarism-

1. Do not show another student a copy of your work before it has been graded. The penalties for permitting your work to be copied are the same as the penalties for copying someone else's work.
2. Do not leave printouts of your work where other students may pick them up.

Important Covid-19 Information for Classrooms and Laboratories: Students are required to wear face masks covering their nose and mouth, and follow social distancing guidelines, at all times in public settings (including classrooms and laboratories), as specified by Procedures for Fall 2020 Return to Normal Operations. The UT Tyler community of Patriots views adoption of these practices consistent with its Honor Code and a sign of good citizenship and respectful care of fellow classmates, faculty, and staff.

Students who are feeling ill or experiencing symptoms such as sneezing, coughing, or a higher than normal temperature will be excused from class and should stay at home and may join the class remotely. Students who have difficulty adhering to the Covid-19 safety policies for health reasons are also encouraged to join the class remotely. Students needing additional accommodations may contact the Office of Student Accessibility and Resources at University Center 3150, or call (903) 566-7079 or email saroffice@uttyler.edu.

Recording of Class Sessions: Class sessions may be recorded by the instructor for use by students enrolled in this course. Recordings that contain personally identifiable information or other information subject to FERPA shall not be shared with individuals not enrolled in this course unless appropriate consent is obtained from all relevant students. Class recordings are reserved only for the use of students enrolled in the course and only for educational purposes. Course recordings should not be shared outside of the course in any form without express permission.

Additional Policies: http://www.uttyler.edu/academicaffairs/files/syllabuspolicy.pdf

Academic Calendar: https://www.uttyler.edu/schedule/files/academic-calendar-20-21.pdf

Final Exam Schedule: https://www.uttyler.edu/schedule/files/final-exam-schedule.pdf?rand=1