1. Course number and name

COSC 4373: Advanced 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 Ed, Connolly and Begg, Prentice Hall, 2015, ISBN 9780132943260
 - a. *Other supplemental materials*Course materials will be provided.
- 5. Specific course information
 - a. A brief description of the content of the course (catalog description)
 A study of database management concepts from non-relational databases including object-based databases, multimedia databases, XML, and data warehouses.
 - b. *Prerequisites or co-requisites*COSC 2336 (Data Structures and Algorithms)
 - c. Indicate whether a required, elective, or selected elective course in the program
 Elective course for BSCS program
- 6. *Specific goals of the course*
 - a. Specific outcomes of instruction, The student will be able to:
- 1. Describe the difference between managing object-based data and managing relational data
- 2. Write DML and DDL statements for object-based data
- 3. Describe the difference between managing structured data and managing semistructured data
- 4. Be prepared to implement algorithms in multiple programming languages, on multiple hardware platforms, and in multiple operating system environments.
- 5. Be able to perform analysis, design, implementation, testing, and maintenance of computer-based systems, stressing software engineering principles.
- 6. Write queries designed for managing data in an OLAP environment
- 7. Brief list of topics to be covered

- Object-Oriented DatabasesObject-Relational Databases
- Relational Databases
- XML
- Other Databases

COSC 4373 Advanced Database Design Fall 2021

General Information

InstructorLeonard BrownOffice LocationSoules 315.03

Office Hours MWF 1:30 p.m. – 2:30 p.m. (or by appointment)

Phone (903) 566-7403 Email lbrown@uttyler.edu

Class Time/Location MWF 10:10 a.m. – 11:05 a.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 September 27, 2021

Exam II October 22, 2021

Exam III November 17, 2021

Final Exam (See University Schedule)

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

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	400 points
Final Examination	300 points

Course grades will be assigned based on the following scale.

900-1000	А
800-899	В
700-799	С
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 assignments submitted late. Assignments will not be accepted after 48 hours.

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.

Information for Classrooms and Laboratories: Students are expected to wear face masks covering their nose and mouth in public settings (including classrooms and laboratories). 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, digestive issues (e.g. nausea, diarrhea), or a higher than normal temperature should stay at home and are encouraged to use the UT Tyler COVID-19 Information and Procedures website to review protocols, check symptoms, and report possible exposure. 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.

Additional Policies: http://www.uttyler.edu/academic-affairs/files/syllabuspolicy.pdf

Academic

Calendar: 2021-22 Academic Calendar (uttyler.edu)

Final Exam

Schedule: Final Exam Schedule (uttyler.edu)

Tentative Course Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
Aug 23	24	25	26	27
30	31	Sep 1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24 HW #1 Due
27 Exam I	28	29	30	Oct 1
4	5	6	7	8 HW #2 Due
11	12	13	14	15
18	19	20	21	22 Exam II
25	26	27	28	29 HW #3 Due
Nov 1	2	3	4	5
8	9	10	11	12 HW #4 Due
15	16	17 Exam III	18	19
22	23	24	25	26
29	30	Dec 1	2	3 HW #5 Due
6	7	8	9	10