

University of North Texas at Dallas

Syllabus

CSCE 4350	Introduction to Database Systems Design (3 Hrs)	Fall 2019
Department:	Mathematics and Information Sciences	School: Liberal Arts and Life Sciences
Instructor name:	Dr. Saif Al Sultan	
Office Location:	Founders Hall 222	
Office Phone:	972-338-1539	
Email Address:	Saif.alsultan@untdallas.edu	
Office Hours:	MW 1:00 PM – 3:00 PM TuTh 1:00 PM – 3:00 PM Or by appointments	
Classroom Time & Location:	MW 11:30 AM - 12:50 PM in DAL1 136	
Course Catalog Description:	Logical and physical database system organization; logical models; design issues; secondary storage considerations.	
Prerequisites:	CSCE 2110	
Required Text:	<ul style="list-style-type: none"> • Connolly, T. and Begg, C., Database Systems: A Practical Approach to Design, Implementation, and Management, 6th Edition, Pearson, ISBN 978-0-13-294326-0. 	
Recommended Texts and References:		
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fhcg.follett.com	
Course Goals: The goals of this course are:		
Provide an understanding of real-world database systems and how they are applied in organizations.		
Student Learning Outcomes: Upon successful completion of this course, the student will be able to:		
<ul style="list-style-type: none"> • Explain the database systems, their advantages to information storage and retrieval. • Analyze data and information to identify the design requirements. • Design conceptual, logical, and physical data models. • Use the SQL language to define and manipulate a relational database. • Work effectively as a member of a database development team to design and implement a relational database. 		

Course Outline

Priority will be given to understanding the material in depth. This schedule is subject to change by the instructor, any changes to this schedule will be announced in class.

Date	Topics	Reference in the text
8/26	Introduction to Databases	Chapter 1
8/28	Database environment	Chapter 2
9/4	Database environment	Chapter 2
9/9	Database System Development Lifecycle	Chapter 10
9/11	Database System Development Lifecycle	Chapter 10
9/16	Entity-Relationship Modeling	Chapter 12
9/18	Entity-Relationship Modeling	Chapter 12
9/23	Entity-Relationship Modeling	Chapter 12
9/25	The Relational Database model	Chapter 4
9/30	The Relational Database model	Chapter 4
10/2	The Relational Database model	Chapter 4
10/7	Exam 1	
10/9	Normalization	Chapter 14
10/14	Normalization	Chapter 14
10/16	Normalization	Chapter 14
10/21	Relational Algebra and Relational Calculus	Chapter 5
10/23	Relational Algebra and Relational Calculus	Chapter 5
10/28	Relational Algebra and Relational Calculus	Chapter 5
10/30	SQL: Data Definition (create table, alter table and drop table)	Chapter 7
11/4	SQL: Data Definition (create table, alter table and drop table)	Chapter 7
11/6	SQL: Data Definition (create table, alter table and drop table)	Chapter 7
11/11	Exam 2	
11/13	SQL: Data Manipulation (insert, delete, update and select)	Chapter 6
11/18	SQL: Data Manipulation (insert, delete, update and select)	Chapter 6
11/20	SQL: Data Manipulation (insert, delete, update and select)	Chapter 6
11/25	SQL: Data Manipulation (insert, delete, update and select)	Chapter 6
11/27	SQL: Data Manipulation (insert, delete, update and select)	Chapter 6
12/2	Web technology and Database management systems (DBMs)	Chapter 29
12/4	Review	
12/11	Final Exam (11:00AM-1:00PM)	

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course. The following matrix is subject to change by the instructor, any changes to this schedule will be announced in class.

Grading Matrix

Assessment method	Points	Total
Assignments/quizzes	Assignments/quizzes will be given on different topics with different weights. Assignments will involve designing and writing computer programs to apply the concepts discussed in each topic.	40%
Participation	5%	5%
Exam 1	15%	15%
Exam 2	15%	15%
Final Exam	25%	25%
Total:		100%

The following standard grading scale will be used to determine your final letter grade:

A = 90% or better

B = 80 – 89 %

C = 70 – 79 %

D = 60 – 69 %

F = less than 60%

University Policies and Procedures

Students with Disabilities (ADA Compliance):

Chapter 7(7.004) Disability Accommodations for Students

The University of North Texas at Dallas makes reasonable academic accommodation for students with disabilities. Students seeking accommodations must first register with the Disability Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver

letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Disability Services Office website at <http://www.untDallas.edu/disability>. You may also contact them by phone at 972-338-1777; by email at UNTDisability@untDallas.edu or at Building 2, room 204.

Course Evaluation Policy:

The student evaluation of teaching effectiveness is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider a student's evaluation to be an important part of your participation in this class.

Assignment Policy:

All assignments are due in class on the due dates stated on the assignments. No late assignments will be accepted, except for documented emergencies. All assignments are to be done individually unless stated otherwise on the assignment.

Make-Up Exams:

Exams should be taken as scheduled. No makeup examinations will be allowed, except for documented emergencies (See Student Handbook).

Email Policy:

Use your CANVAS email account to contact me. You should check your email every day as you are responsible for all information I send out. Due to privacy rights, I will not discuss grades over the phone and I will only answer emails from your CANVAS account.

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at http://www.untDallas.edu/sites/default/files/page_level2/pdf/policy/7.002%20Code%20of%20Academic_Integrity.pdf for complete provisions of this code.

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

Inclement Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is mandatory because the class is designed as a shared learning experience. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent. Successfully completing this class is a function of many factors. Two such factors are class attendance and assignment completion.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.

Cell Phones:

Cell Phone use (ringing, texting, reading, etc.) in class is strictly prohibited.

General Policies:

Leaving class early is generally prohibited. You may leave class if you are not returning in the case of an emergency. Leaving class should be by the permission of the instructor.

It is the students' responsibility to be aware of all announcements made for the class and changes made to the syllabus.