



TEXAS A&M UNIVERSITY
SAN ANTONIO

CISA3351-601 Database Design and SQL - CRN 11203

Fall 2024

Department of Computing and Software Security, College of Business

Course Syllabus

Class Modality Time and Place:	Tuesday 11:00 am-1:45 pm. Zoom
Class Duration:	Aug 26, 2024 - Dec 13, 2024
Instructor:	Dr. Robert Vinaja Office: Business & Library Building 441D Tel: 210-784-2329 E-Mail: Robert.Vinaja@tamusa.edu Student emails will receive a reply within two business days.
Course Website:	https://tamusa.blackboard.com/
Office Hours:	Tuesday 8:00 – 11:00 am (online) Thursday 9:55 am – 12:55 pm (office & online) and by appointment
Office Hours Link:	https://tamusa.zoom.us/j/4513131703 Meeting ID: 451 313 1703

COURSE DESCRIPTION AND OBJECTIVES

Basic database design and introduction to structured query language (SQL). Includes instruction on creating user interface forms for a database. Prerequisite: CSCI 1336.

Course Objectives: Students will learn the principles of database design. They will also learn the basics of SQL for both data definition and manipulation. They will apply this knowledge in a practical project.

Prerequisites: CSCI 1336. Students who do not meet the pre-requisites must contact the instructor immediately.

Student Learning Outcomes:

After successful completion of this course, students will be able to:

1. Explain the concepts, principles, and techniques of database design, implementation, and processing.
2. Produce database design documents consistent with professional practice guidelines
3. Implement a database and related forms and reports given a database design
4. Write queries using SQL
5. Apply the concepts, principles, and techniques of database design and implementation to business problems.
6. Complete a database project of intermediate-level difficulty

AACSB Assessment:

The College of Business is AACSB accredited. As part of this accreditation, students will be assessed on program level outcomes based on course outcomes from various courses. The materials from this course may be used for assessing such program level outcomes, and hence students must follow the necessary rigor to ensure mastery of the above course outcomes.

Required Materials:

A. To be purchased

- B. CENGAGE UNLIMITED. Instead of just buying the textbook by itself you will buy the Cengage Unlimited code that includes **both the textbook and other additional resources.**

Cengage Unlimited, 1 term (4 months), 1st Edition ISBN: 9780357700006

- MyEducator

https://app.myeducator.com/account/shopping_cart/-?signupid=25R-NeUt001

Computer Hardware: In order to participate in the class you will need a computer with an internet connection, a **webcam** and a microphone and speakers/headphones. Also, it is recommended that you have 2 devices with internet access.

C. Additional Free Items

You will need to use additional software to complete class assignments. These tools do not require a purchase. Instructions and website links or additional software will be provided.

- **Time:** You are expected to spend 4-8 hours per week for the course. Based on the background, some students may require more time. Time spent may be longer when assignment/exams are due.

Other Recommended / Reading Materials: Additional reading materials are available on the course website as recommended by the instructor.

Course Requirements every student must fulfill in order to succeed in course:

1. Students should check the Course Calendar, Announcements, and Messages (e-mail) systems in Blackboard on a regular basis.
2. Students should keep current with all course assignments, quizzes, and examinations.
3. Students should ask questions and communicate with the instructor either in class, online, off-line or during office hours.
4. For all classwork, exams, quizzes etc., if a student is completing it off-campus, then they are responsible for availability of internet connectivity. Extensions will be granted for lack of availability of internet connection only if the instructor is notified.

Grading Policy: The final course grade will be based on your performance on the quizzes, exams, assignments and class participation using the following weights:

GRADES	Points
ATTENDANCE/PARTICIPATION	100
HOMEWORK SETS (include Assignments, Projects, Papers, and Quizzes)	550
MID TERM EXAM	100
FINAL EXAM	250
TOTAL	1000

Grades will be based on the following percentage ranges:

A = 900 - 1000

B = 800 - 899

C = 700 - 799

D = 600 - 699

This course has a requirement of a grade of C as a minimal grade for satisfactory completion of this course.

Examinations and Quizzes: There will be mandatory mid-term exams and a mandatory final exam (as per university schedule). Missing an exam will result in a grade of zero for that exam and may result in a fail grade in the course. The exam/quiz materials will come from lecture notes, the textbook, and class discussions. Questions will emphasize understanding and applications of concepts and topics covered in class. Additional details about the format for the exams will be provided in advance. You are expected to read every chapter in advance.

Assignments/ Research papers: There will be several assignments and projects during the course. Individual assignment statements and due dates will be posted through Blackboard. The research papers will provide an opportunity for an in-depth investigation of specific topics. Additional instructions and requirements for the research papers and projects will be provided as separate handouts at the course website.

Make up and Late Assignment policy:

Exams: As a general rule, make-ups or late submissions will **NOT** be offered or accepted for any missed exams/quizzes. If you miss an exam for a valid documented excuse, then the grade for the missed exam will be replaced with a grade equivalent to the percentage score in the final exam. If you miss the final exam, you must contact the instructor within 24 hours and provide valid proof of your special situation. If you miss class and miss the pop quiz for that day, there is no make-up for the pop-quiz, but you can complete one of the extra credit activities to get extra points.

Assignments: All assignments must be (100%) complete and (100%) accurate before submitted. No incomplete/incorrect submissions will be accepted. Late submissions will be assessed a grade reduction penalty. The grade reduction penalty will be specified in the instructions for the assignment. The grade reduction penalty for late assignments will be waived only if you have a valid **documented** extra-ordinary circumstance such as an excused official university activity, a severe illness, or a dire emergency. Attendance is a direct component of your semester grade, in addition a situation may affect your grade if it causes you to miss assignments. E-mail me if you have a valid excuse but **do not submit any documentation until requested.**

Class conduct and civility code: Everyone in class is expected to follow all rules in the student handbook, as well as common courtesy during classroom lectures and discussions in class and online, including the following:

1. It is the students' responsibility to obtain and be able to use the required materials and software.
2. Student must retain copies of all assignments and graded work for verification purposes. Keep copies of all computer files and e-mails.
3. If you will not be able to complete this course, dropping from this class is your responsibility.
4. For any questions about the exams and assignments, a student should contact the instructor, before the day they are due, so the instructor may have enough time to provide feedback.
5. All communications will be via e-mail communications to the Texas A&M University e-mail account, and students are expected to use their school provided email account. The instructor will reply to a student e-mail messages and voice messages within 24 hours during weekdays.
6. All assignment submissions must be uploaded to Blackboard by the due date/time.

Anyone violating these policies may be subject to disciplinary actions.

Class attendance and Participation: A vital part of every student's education is regular attendance of class meetings. Any absences tend to lower the quality of a student's work, and frequent or persistent absences may result in a failing grade. You are responsible for any missed instruction or assignments. Classroom participation includes pop quizzes related to computer assignments, discussion of chapters, cases and additional materials. E-mail communication, phone calls and office visits are not part of classroom participation. The course is intensive and challenging and you are expected to master the materials presented in class. The structure of the class makes your individual study and preparation outside of class extremely important. Reading the assigned chapter(s) and

having some familiarity with them will be very useful for understanding recorded lectures. Each student will be expected to spend enough time in the preparation of the assignments.

Fall 2024 CISA 3351 Class Schedule

The provisions and information set forth in the schedule below are intended to be informational and not contractual in nature. The instructor reserves the right to amend, alter, change, delete or modify the provisions of the schedule.

<i>WEEK</i>	<i>Chapter and Topic</i>	<i>Due TUESDAY 11:59 p.m.</i>	<i>DUE</i>
1	Introduction		
2	Ch. 1 Database Systems, Oracle APEX, Visio, SAM, Ethics	Homework Set 1	9/3/2024
3	Ch. 2 Data Models	Homework Set 2	9/10/2024
4	Ch. 3 The Relational Database Model; SQL Management Studio	Homework Set 3	9/17/2024
5	Ch. 4 Entity Relationship (E-R) Modeling	Homework Set 4	9/24/2024
6	Ch. 13 Business Intelligence and Data Warehouses; Tableau, PowerBI	Homework Set 5	10/1/2024
7	Ch. 7 Introduction to (SQL), Single-Table Queries, Multiple-Table Queries	Homework Set 6	10/8/2024
8	Ch. 7 Introduction to (SQL) (Additional Topics from A Guide to SQL)	Homework Set 7	10/15/2024
9	Ch. 7 Introduction to (SQL) (Additional Topics from A Guide to SQL)	Homework Set 8	10/22/2024
10	Ch. 8 Advanced (SQL)	Homework Set 9	10/29/2024
11	Ch. 8 Advanced (SQL), Creating Tables, Updating Data, Functions, Procedures, and Triggers	Homework Set 10	11/5/2024
12	MIDTERM EXAM	Homework Set 11	11/12/2024
13	Ch. 5 Advanced Database Modeling	Homework Set 12	11/19/2024
14	Ch. 6 Normalization, Ch. 11. Database Performance Tuning and Query Optimization		11/26/2024
15	Ch 14. Big Data and NoSQL Ch. 15 Database Connectivity and Web Technologies Ch 16. Database Administration and Security, Database Administration		12/3/2024
16	Final Exam – As per University Schedule (10-11:50 am)		12/10/2024

Important Dates:

August 26	First day of class
November 11	Last day to drop with an automatic “W”
November 19	Last day to drop a course or withdraw from the University
November 27	Study Day – No classes
November 28-30	Thanksgiving Holiday – University closed
December 5	Last day of classes
December 6	Study Day – No classes
December 7-13	Final exams

The complete academic calendar is available online: <https://www.tamusa.edu/academics/academic-calendar/index.html>

The text in the remaining sections is a compilation of University policies at:
[Academic Planning \(tamusa.edu\)](https://www.tamusa.edu)

IMPORTANT POLICIES AND RESOURCES

Academic Accommodations for Individuals with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us <https://www.tamusa.edu/Disability-Support-Services/index.html> or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

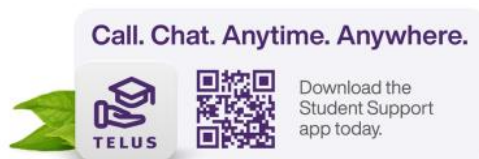
Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

Counseling/Mental Health Resources: As a college student, there may be times when personal stressors interfere with your academic performance and negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment, call 210-784-1331 or visit Madla 120.

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information on SCC services visit [tamusa.edu/studentcounseling](https://www.tamusa.edu/studentcounseling)

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2').

Additionally, the TELUS Student Support App provides a variety of mental health resources to including support for in the moment distress, an anonymous peer to peer support network, mental health screenings, podcasts, and articles to improve your mental wellbeing.



Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: <https://tamusa.bbcportal.com/>.

More information about Emergency Operations Plan and the Emergency Action Plan can be found here:
<https://www.tamusa.edu/about-us/emergency-management/>.

Download the SafeZone App (<https://safezoneapp.com/>) for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900.

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to

begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Any student receiving federal financial aid who does not attend by the census date will have their financial aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester, a Care report will be submitted, and you will possibly be dropped from the class. Your financial aid may have to be recalculated and a portion of your federal aid may have to be returned to the DoE.

Writing, Language, and Digital Composing Center: The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on “Writing, Language, and Digital Composing Center” to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at <https://www.tamusa.edu/academics/>.

Meeting Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to submit a CARE referral (<https://www.tamusa.edu/university-policies/Student-Rights-and-Responsibilities/file-a-report.html>) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to visit the Office of Military Affairs for any question involving federal or state VA Education Benefits. Visit the Patriots’ Casa building, room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or course work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student’s GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as “F” grades and will impact the student’s GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equal opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, gender expression, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are available. A&M-San Antonio’s Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment, sexual violence, or other related misconduct, the faculty member must share that information with the university’s Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a

confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide such reasonable accommodations to pregnant students as would be provided to a student with a temporary medical condition that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, gender identity, gender expression, and pregnancy/parenting or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty, and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, [Student Code of Conduct](#), on our website, and University Catalog, and to comply with them, as well as with federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide a safe environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notifications.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation, or disability. Conduct that infringes on the rights of another individual will not be tolerated.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the Student Code of Conduct (<https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/documents/Student-Handbook-2022-23.pdf>) or visit the resources available in the OSRR website (<https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/academic-integrity.html>).

Broader Use of Generative AI Permitted Within Guidelines

Use of artificial intelligence (AI) tools, including ChatGPT, is permitted in this course for students who wish to use them, except for exams. To adhere to our scholarly values, students must cite any AI-generated material that informed their work (this includes in-text citations and/or use of quotations, and in your reference list). Using an AI tool to generate content without proper attribution qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

NOTE: Guidance for how to cite AI-generators, like ChatGPT, can be found here <https://apastyle.apa.org/blog/how-to-cite-chatgpt>