



CS/SE 4347 – Database Systems Syllabus

Term Fall 2026

Sections 4347.009

ECSS 2.312

TR 100–215

Instructor

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Hours TR 1000-110 or by appointment
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Contacting the Instructor **Email:** I teach a lot of classes, a lot of sections in those classes, and a lot of students. Contacting me by email is always the best way, but you must start the subject line of any e-mail you send with your class and section (e.g. “CS 4347.009”). If you do not, it will be marked as spam (not the gelatinous canned meat product) and will not be answered.

Making an Appointment: Often, making an appointment is the best way to meet with me. Please use MS Teams or Outlook to send me a meeting request. As with e-mail please include your class and section in the request.

Phone/Teams Chat: If you try to contact me by phone or through chat on MS Teams, I cannot guarantee a timely response.

Course Information

Course Description Emphasizes the concepts and structures necessary for the design and implementation of database management systems. Topics include data models, data normalization, data description languages, query facilities, file organization, index organization, file security, data integrity, and reliability. (3-0) Y

Prerequisites Prerequisite: ([CE 3345](#) or [CS 3345](#) or [SE 3345](#)) with a grade of C or better.

Learning Outcomes

- ✓ Understand Data Modeling
- ✓ Understand the Relational Model and theory.
- ✓ Understand the normalization of relations.
- ✓ Gain a fundamental understanding of SQL programming.
- ✓ Understand and protect against SQL attacks.
- ✓ Understand data organization methods, indexing, and query processing.
- ✓ Understand database integrity and concurrency.

Required Texts We will be using:

- Fundamentals of Database Systems (7th Edition) by Ramez Elmasri, Shamkant B. Navathe, ISBN-13: 978-01339707

Though the text is not required, we will be referencing some material from:

- Database System Concepts, Seventh Edition, by Avi Silberschatz, Henry F. Korth, S. Sudarshan, McGraw-Hill Book Company 2020, ISBN 9780078022159

Grading Criteria	Quizzes	10%	A+	≥97	C-	70-72
	Assignments	15%	A	93-96	D+	67-69
	Project	15%	A-	90-92	D	63-66
	Exam #1	30%	B+	87-89	D-	60-62
	Exam #2	30%	B	83-86	F	<60
	Make-Up Exams	NONE	B-	80-82		
	Late Work	NONE	C+	77-79		
	Extra Credit	NONE	C	73-76		
	Curve of ANY Kind	NONE				

Course Policies & Classroom Expectations

Comet Creed	“As a Comet, I pledge honesty, integrity, and service in all that I do.”
Attendance Policy	This course is scheduled to be taught in the Traditional (in person) Mode. Regular and punctual class attendance is expected. University and department policy is students attend live, face to face lectures and to record attendance when possible. My policy is to record attendance for every class. This is accomplished by circulating an attendance sheet for each class meeting. It is the responsibility of each student to ensure that their attendance is recorded during the lecture only. Any attempt to cheat the process (e.g., having another individual sign in on your behalf) will be reported to the university for disciplinary action. Students who do not attend class regularly are likely to experience academic difficulties, which may negatively affect their performance on course examinations.
Computers, Phones, and Recording Devices	I do not permit computers, cell phones, or recording devices in class during lectures. Tablets that use a digital pen (no keyboards or mice) are allowed for students to take notes. This is not a popular rule among students, but it is done so to maintain fairness in the academic environment for all students. There is no need to copy my examples in class as I will make them available to you. I would rather you focus on how we are solving the problem.
Cheating	Homework, labs, projects, and exams are individual endeavors. I have a zero-tolerance policy for cheating. Should I discover cheating issues, I will immediately report to the OCSC without warning for disciplinary action. Cheating can include (but is not limited to) the following: • Copying answers from a classmate • Turning in answer(s) that were clearly derived from a classmate's answers • Falsifying attendance or quiz/exam registry • Work (and especially code) created by AI and not by you • Faking code functionality (making it pass tests without actually doing the work) The only resources you are allowed to use for your work are: • your instructor • the assigned textbooks (except for the written portion of exams)

Grade Disputes	Assignments and projects will be graded by a teaching assistant (TA). Please direct any questions or concerns regarding the grading of assignments and projects to the TA. If you have a legitimate concern that cannot be resolved with the TA, you may discuss the matter with me during my office hours. All grade disputes must be reported within 1 week of the grade in question being posted in eLearning. Uncontested grades will become final after 1 week and cannot be disputed later. If you have questions regarding your grades, please contact your instructor. Please note that due to FERPA, grades cannot be discussed via e-mail.
Class Materials & Recordings	The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments. Students are expressly prohibited from recording any part of this course. <u>This includes cell phone cameras/video.</u> Failure to comply with these University requirements is a violation of the <u>Student Code of Conduct</u>, and <u>will</u> negatively impact your grade.
My Expectations for Students	• If you feel that you are struggling with this course, please talk to me during my office hours. • Please ask questions during lectures, before or after class, during office hours, or via email if you do not understand anything presented in class. • Attend every class. • Arrive to class on time and remain in class until dismissed. Once you come to class, it is not appropriate to leave the class early for any reason. If you know you must leave early for an unavoidable and important reason, make sure you sit close to the door and leave the classroom without distracting others while leaving. For the same reason, you also make sure you come to class on time. • Students who cause disruptions—such as talking without permission during a lecture—may be required to leave the classroom. Disruptive behaviors include, but are not limited to, talking during class, using a mobile phone, and sleeping in class. Thus, all cell phones must be silenced during class. • Regular class attendance and participation are expected and are the responsibility of everyone. If a student does not attend a class, they are responsible for any handouts, announcements, reading material, and contents of missed lectures.

Additional Resources

Academic Support	Please go to http://go.utdallas.edu/academic-support-resources .
Syllabus Policies	Please go to http://go.utdallas.edu/syllabus-policies for these policies.

Course Schedule (Tentative)

Date	Topic	Chapter	Project Deliverable
Tue, Aug 25	Syllabus, Introduction	1, 2	
Thu, Aug 27	Introduction	1, 2	
Tue, Sep 1	Introduction	1, 2	
Thu, Sep 3	Data Modeling	3, 4	Phase 0
Tue, Sep 8	Data Modeling	3, 4	
Thu, Sep 10	Data Modeling	3, 4	
Tue, Sep 15	The relational Data Model	5	
Thu, Sep 17	The relational Data Model	5	Phase 1
Tue, Sep 22	SQL Programming	6, 7	
Thu, Sep 24	SQL Programming	6, 7	
Tue, Sep 29	SQL Programming	6, 7	
Thu, Oct 1	SQL Programming	6, 7	
Tue, Oct 6	SQL Programming	6, 7	
Thu, Oct 8	Exam Review		
Fri, Oct 9	EXAM #1 (1200-400p @ Testing Center)		Phase 2
Tue, Oct 13	Normalization	14, 15	
Thu, Oct 15	Normalization	14, 15	
Tue, Oct 20	Normalization	14, 15	
Thu, Oct 22	SQL Injection and Protection		
Tue, Oct 27	SQL Injection and Protection		
Thu, Oct 29	Organization, Indexing, and Processing	17	
Tue, Nov 3	Organization, Indexing, and Processing	17	
Thu, Nov 5	Transactions, Concurrency & Integrity	20, 21	
Tue, Nov 10	Transactions, Concurrency & Integrity	20, 21	
Thu, Nov 12	Transactions, Concurrency & Integrity	20, 21	Phase 3
Tue, Nov 17	Transactions, Concurrency & Integrity	20, 21	
Thu, Nov 19	Concurrency & Integrity & Recovery	21,22	
Tue, Nov 24	Holiday- Fall Break		
Thu, Nov 26	Thanksgiving Break		
Tue, Dec 1	Concurrency & Integrity & Recovery	21,22	Phase 4 (11/31 – 12/03)
Thu, Dec 3	Concurrency & Integrity & Recovery	21,22	Phase 5
Tue, Dec 8	Exam Review		
Thu, Dec 10	Reading Day		
Tue, Dec 15	EXAM #2 (1200-400p @ Testing Center)		

Note: All project deliverables are due on Saturday of that week at 11:59:00pm unless otherwise noted.

*The descriptions and timelines contained in this syllabus
are subject to change at the discretion of the instructor.*