

**CSCE 5350 – Database Design
Fall 2010**

Instructor: Dr. Yan Huang
Office: DP F251
Office Hours: TThu 10:00-11:00am
Email: huangyan 'at' unt.edu

Time and Place: TTh 12:30pm-01:50pm, Discovery Park B142
Class Website: <http://www.cs.unt.edu/~huangyan/5350>

TA: Vishwanathan, Roopa
TA Office Hours: Mondays 2:00pm to 6:00 p.m.
TA Office: F205

Text Book: Database Systems Concepts, Sixth edition
by [Abraham Silberschatz](#), [Henry F. Korth](#), [S. Sudarshan](#)
ISBN: 0073523321, Publisher: McGraw-Hill Science/Engineering/Math

Supplement Books:

- Elmasri, Navathe, Fundamentals Of Database Systems, 5rd, Addison Wesley, ISBN: 0321369572
- Hector Garcia-Molina, J. Ullman, J. Widom, Database Systems - The Complete Book, Prentice Hall, ISBN 0-13-031995-3.

Course Objectives: To give students a solid understanding of the design and implementation of database management systems. At the end of the course, students will know how to design a database from conceptual level, convert the conceptual design to relational databases, write SQL queries to retrieve relevant data from databases, and relational database theories that guide a good database design. Advanced topics such as transaction, access methods, query processing, data warehousing, and XML as well as emerging technology such as data mining will be introduced.

Grading Scheme: Assignments: 15%
Project: 20%
Exam I: 20%
Exam II: 20%
Final: 20%
Class participation: 5%

Each assignment will specify the material to be turned in. Assignments are due before class on the due date. Assignments may be turned in up to 3 days late, with a penalty of 10% for each day late (week ends and holidays will be counted). No credit will be given after 3 days.

Exams: Exams are closed book and closed notes. One page cheating sheet (8x11, any font size, front and back) is allowed. The exams are NOT accumulative or comprehensive. No exams will be given at other times without documented excuses.

Policies:

1. Each program and homework assignment must be worked on individually. A submission carries with it an implicit statement that the submission is your own work. You may discuss the requirements and syntactical issues, but not solutions or designs. Cheating behavior will be handled seriously. Specifically, first time violation will result in a zero mark on that assignment, project, or exam. Second time violation will result in a failing grade. All students involved in a collusion will be treated the same.
2. Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at www.unt.edu/csrr
3. Please be on time especially when there are assignments due at the beginning of the class. Assignments will not be accepted 10 minutes after the class starts and will be considered as one day late.

**Disabilities
Accommodations:**

Disabilities Accommodation: The University of North Texas complies with Section 504 of the 1973 Rehabilitation Act and with the Americans with Disabilities Act of 1990. The University of North Texas provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please see the instructor and/or contact the Office of Disability Accommodation at 940-565-4323 during the first week of class.

**SETE
Evaluation:**

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester. Please make sure you take this chance to comment on how this class is taught.

**Tentative
Schedule:**

Week 1 Introduction
Week 2 Conceptual Models
Week 3 SQL
Week 4 Relational Data Model
Week 5 Exam I, Relational Algebra
Week 6 Relation Database Design
Week 7 OODB and XML
Week 8 Access Method
Week 9 Query Processing and Optimization
Week 10 Exam II
Week 11 Transactions
Week 12 Concurrency Control and Recovery
Week 13 Database System Architecture
Week 14 Data Warehousing and Mining
Week 15 Project Presentation