California State University, Sacramento College of Engineering and Computer Science Department of Computer Science Fall 2015

CSC 134 Database Management and File Organization

Instructor

Dr. Ying Jin, Professor Office: RVR 5038

Office Hours: Wednesday 1:25 pm -1:55 pm

Friday 11:50 am-1:50 pm, 2:50 pm - 3:20 pm

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Course Description

Introduction to database system concepts and architecture; Entity-relationship model; ER to relational mapping; Relational algebra; SQL; Functional dependencies and normalization for relational databases; Disk storage, basic file structures, and hashing; Indexing structure for files; Introduction to query processing and transaction processing.

Course website

http://online.csus.edu

Students are required to check SacCT at least once a day. Some announcements will be posted on SacCT.

Textbook

Elmaseri and Navathe, *Fundamentals of Database Systems*, 6th Edition, Addison-Wesley Publishing

Pre-Requisites

CSc 130 (with a C- or better))

Grading

Homework assignment: 18%

(assignment1: 3%, assignment2: 3%, assignment3: 12%)

Midterm Exam: 38% Final Exam: 39% Class participation: 5%

Grading Scale:

93-100 A

90-92 A-

87-89 B+

84-86 B

80-83 B-

77-79 C+

74-76 C

70-73 C-

67-69 D+

64-66 D

60-63 D-

59 or less F

Coursework

***** Lecture

Students are expected to attend all lectures. Students are responsible for making arrangements to get notes from other students if they are absent. Students are responsible for getting information from other students about any announcement announced during class period, if they are absent. Some announcements will be posted on SacCT. Students are responsible to check SacCT at least once a day.

♦ Exam

Exams are closed book. MAKE-UP EXMAS ARE NOT GIVEN.

In case of medical emergency, 1) the student must inform the instructor BEFORE the exam by email AND by phone call (leave a message if the instructor is not in the office); 2) Bring a doctor's note that excuses the student from the activity of taking an exam in the given day; 3) the notes must be submitted to the instructor's department mailbox within the same week that the exam is scheduled.

***** Homework assignment

All homework submission must be typed and submitted through SacCT.

Homework submitted in other ways, such as by email, will not be graded and will get a zero. Double check the correctness of files before your submission. Email attachments with a new version with an explanation such as "I forgot to include file_xyz in my submission, please do grading based on this attachment" will NOT be considered.

Late assignments:

Late assignment will be accepted, the penalties are:

- Second day (within 24 hours after the due time): 20% off the assignment grade
- Third day (24-48 hours after the due time): 50% off the assignment grade
- After the third day (more than 48 hours after the due time): 0 for the assignment.

There is no guarantee when the late assignment will be graded. Since all the assignments will be given *enough* time to complete, it is strongly recommended to complete the assignment on time.

Return of graded work

Students can get graded homework assignments through SacCT. The instructor will give the midterm exam back at the beginning of a class. Students are responsible for picking up the graded work during instructor's office hours if they are absent. If students do not pick them up before the final exam, their graded work will be shredded at the date of the final exam. Graded final exams will be kept for 9 months.

Students are required to keep backup copies of all submitted work, and also keep all graded work, until after final grades are posted and accepted without disagreement.

❖ In-Class Participation

The instructor will periodically take roll, and deduct 1% from your final class grade for every class you missed. Maximum deduction is 5%. Two times of absent will be excused. No third time absent will be excused regardless of the reason.

Course Outline (Tentative schedule)

Week 1	Database system concepts and architecture
Week 2.	Entity-Relationship model
Week 3	Relational Data model
Week 4	ER to relational Mapping
Week 5-6	Relational algebra
Week 7-9	SQL
Week 10	Midterm Exam (Nov.6 class room, class time)
Week 11	Normalization
Week 12	Normalization, Disk storage and basic file structures
Week 13	Indexing Structure for files
Week 14	Hashing. Two phase merge-sort.
Week 15	Introduction to query processing, transaction processing
Week 16	Final Exam