

Database Management Systems - IS 475, Fall 2007, Room: BC 115, Day/Time: MW, 2:30-3:45

Instructor: **Jennifer Kreie**

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Office Hours: MWF 9:00 AM -10:00 AM,

WebCT: <http://salsa.nmsu.edu/>

Tues. 12:30 PM -2:00 PM or by appointment

Classes: MWF 10:30-11:20, IS 485 (560), BC 115

MWF 12:30-1:20, IS 350 (540), BC 106

MW 2:30-3:45, IS 475 (595), BC 115

Text - *Database: Design, Application Development, & Administration, 2nd Ed.*, M. V. Mannino, Irwin McGraw-Hill, 2004. The textbook uses two databases which will be available through WebCT for this course. One database is the basis for chapter examples and the other is used for end-of-chapter problems.

Course Description - This course teaches database concepts, with a focus on relational databases. This course covers concepts about building, managing, and using databases and includes extensive coverage of SQL (structured query language), the standard language of relational databases. The coverage of SQL will include DDL (data definition language) language subset used to construct a database, DML (data manipulation language) used for basic and advanced queries and embedded SQL in procedural programming languages for custom applications. This course will also introduce database management concepts that deal with installation of DBMS software and managing users, physical storage, and database performance. Prerequisite: IS 350 with a grade of "C" or better.

Course Objectives - The student who completes this course should know:

1. The features of database management systems, such as Microsoft Access and Oracle.
2. Relational database concepts, such as 1st, 2nd, and 3rd normal form, and referential integrity.
3. SQL--the standard language of relational databases; including variations in Microsoft Access and Oracle.
4. How to embed SQL in a procedural language such as Oracle's PL/SQL or Microsoft Access' Visual Basic.
5. Basic DBA activities to manage a relational database--manage physical storage, create databases, manage user accounts, and assign and monitor privileges.

Examinations - There will be four exams. The exams will cover material from the textbook and lectures. The final exam covers the material since the previous exam and any concepts and skills used throughout the course. Exams will be a combination of multiple choice, problems, and short answer.

If you miss an exam due to illness, work, or a university-sponsored activity, you must provide proper notification to the instructor as soon as possible. If no valid excuse is provided the student will receive a score of zero for the missed exam.

Assignments and Quizzes - Assignment exercises will be assigned as individual work unless otherwise specified by the instructor. Students are expected to submit their own work. This is a senior-level course and most of you have worked together in previous classes. Feel free to talk about problems and help each other figure out solutions but don't copy/paste someone else's work. Submission of someone else's work as one's own, will result in a zero for that an assignment. See the section on scholastic dishonesty for further penalties.

The exercises provide hands-on practice that is essential to learning the material. Several databases besides the ones provided by the textbook will be used throughout the course. Many of the in-class and homework exercises will mirror examples given in the textbook or listed at problems at the end of the chapter but will use different databases.

You're encouraged to type all the chapter examples to practice the SQL commands. Many quiz and exam questions will come from the chapter examples and assigned exercises, with only minor changes, so they are good preparation for exams, as well as good practice.

Individual exercises assigned to be done outside of class will be accepted late but there will be a 50% penalty for the first day late and no points after that. Note: An assignment due at the beginning of class will have a 5% penalty if it is turned in at any time later that same day. Exercises assigned to be completed in class will not be accepted late.

Some quizzes may be given as a team effort to provide students an opportunity to discuss concepts and help one another. If a team quiz is given, each member will receive the team score.

Attendance Policy - Attendance is important to doing well in this class--just ask students from the previous semester. However, I will not take attendance. Lecture, discussion, and assignments are an essential part of learning the concepts and skills in this course. If a student misses a class, it is up to the student to find out what was covered by talking to other students, getting someone's notes, and checking the class WebCT site. The student may get specific assignments from the instructor or ask the instructor specific questions after the students has reviewed the notes for the missed class.

Class Procedures - The teaching method for this course will include lecture/discussion, in-class exercises, and homework exercises. All individual exercises are to be done independently. You're welcome to discuss exercises with other students but if you just copy/paste someone else's solution, you won't learn how to use SQL.

Online Procedures - Most of the course material will be available through the WebCT site for this class.

There are topic areas in the Bulletin Board (BB) section for the major topics of this course. If you have a question about an assignment, please post the question in the BB section where everyone can benefit from the information. However, don't use the BB sections for personal communications unless it's your team's private BB section. If you send a question about an assignment through WebCT email, I may ask you to post in the BB section before I respond. Again, everyone should benefit from questions and answers about an assignment.

Please note: If you have a question about an exam or assignment score because the score is missing in WebCT, please feel free to email me about the missing score. If you want to know why you got a particular score, i.e., what did you miss and why, please come see me in my office. I will not respond to emails that ask, "Why did I miss 5 points?" or "What did I do wrong on problem 6?" It takes too much time to review an exam or assignment and type out a lengthy explanation via email. I want us to review the score in question together. Often it is clear to the student what the error is when we review it and sometimes the student is able to explain something about his/her answer which I believe justifies additional credit.

Students with Disabilities - If you have, or believe you have, a disability and would benefit from accommodations, you may wish to self-identify. You can do so by providing documentation to the Services for Students with Disabilities (SSD) Office located at Garcia Annex (Phone: Voice 646-6840, TTY 646-1918). If you are already registered with the SDD Office and need accommodations please provide your Accommodation Memo from the SSD within the first two weeks of class.

If you have a condition that may affect your ability to exit safely from the premises in an emergency or that may cause an emergency during class, you are encouraged to discuss this in confidence with the instructor and/or the Coordinator for SSD. Call 646-3333 with any questions about the Americans with Disabilities Act (ADA) and/or Section of the Rehabilitation Act of 1973. All medical information will be held in strict confidence.

Scholastic Dishonesty - Scholastic dishonesty will not be tolerated. Cheating on an exam or assignment will result in a zero for the first offense and an "F" for the course if another offense occurs.

Point Distribution and Grades - The points possible for this course will be approximately as follows:

| | Estimated Pts | Estimated % of Overall Grade |
|---|---------------|------------------------------|
| Exam 1 | 100 | 20.0% |
| Exam 2 | 100 | 20.0% |
| Exam 3 | 100 | 20.0% |
| Final Exam | 100 | 20.0% |
| Quizzes and in-class & homework exercises | 100 | 20.0% |

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|---------------------|------------|--|
| | | |
| Total Points | 500 | |

Grades will be assigned as follows:

A: 90% through 100%

B: 80% through 89%

C: 70% through 79%

D: 60% through 69%

F: Below 60%