CS 4611
Database Management Systems
Fall Semester 2006

Instructor
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Office
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Office Hours
TTh 2:00-3:00

Course Web Site
http://www.d.umn.edu/~dcrouch/CS4611.html

Course Description
(4 cr. prereq CS 2511, CS 2521, or #)
Study of database management fundamentals focusing on the relational data model. Topics include database organization, file organization, query processing, concurrency control, recovery, data integrity, optimization, and view implementation.

NOTE: You may not remain enrolled in this class unless you have completed the prerequisites satisfactorily.

Required Textbooks

Software Documentation
ITPro and Safari Tech Books On-Line are great sources of additional documentation for databases, Oracle, Unix and other systems available at UMD, in addition to books on almost any other computer topic. For access to the full-text of over 5,000 computer books, choose the Indexes and Databases link on the Library Home Page and then choose Safari or ITPro.

Course Goals
The purpose of this course is to teach you the fundamental concepts underlying database system design, including not only the design of applications using databases, but also covering the fundamental implementation techniques used in database systems. The amount of material that needs to be covered will make this course a rather intensive one to cover in one semester; be prepared for the course load. We will attempt to cover Chapters 1-4, 6-8, 10-17. The course will be supplemented by assignments involving coding and executing SQL queries using Oracle, creating database applications using PL/SQL, and building graphical interfaces to databases using tools contained in the Oracle Developer Suite. It time permits, you may also be required to implement one or more components of a database system or to build tools that support the design of a database.

Tools
We will use the Oracle relational database management system running under Windows and Unix. The WWW and email will be used extensively to provide you with course information, homework assignments, and class messages.
Class Schedule
Lectures on Tuesday/Thursday from 12:30-1:45. Labs will be held on Tuesday evenings, 6:00-8:00, in HH 306. Lab attendance is mandatory. During lab, your GTA will introduce you to the use of various features of ORACLE and will discuss that week’s lab assignment.

Final Exam Date
4:00-5:55, December 16 (Saturday) – No one will be permitted to take the final examination prior to this time.

Grading Basis
Assignments 30%
Laboratory Work
Programming Tasks
Homework
Midterm/Exam(s)/Final 70%

Grading Scale

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<td>A-</td>
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Student Responsibilities
You are responsible for what is covered in class and lab, including
• lecture material
• obtaining assignments and handouts
• turning in assignments
• tests.

If you are unable to attend a class meeting, it is your responsibility to obtain class notes, assignments, and copies of handouts from other students in the class. If, due to extremely unusual circumstances, you are unable to take a test at the scheduled time, the test may be rescheduled. It is your responsibility to gain permission to miss a scheduled test from the instructor at least 24 hours in advance of the time the test is scheduled to be given in class; otherwise, a grade of 0 will be assigned for the test score. All assignments are due at the beginning of class on the due date and must be submitted in the class – not to the TA or instructor outside the class period. No credit will be given for late assignments.

Disabled Students
Individuals who have any disability, either permanent or temporary that might affect their ability to perform in this class are encouraged to inform the instructor at the start of the quarter. Adaptation of methods, materials, or testing may be made as required to provide for equitable participation.