

**CS 3211****Database System Concepts****Fall Semester 2011****Instructor**

Dr. Donald B. Crouch  
Email: dcrouch

**Teaching Assistants**

Sai Chittila - GRA (chit0051)

**Office**

333 Heller Hall

**Office Hours**

TTh 10:45 - 11:30 [Other times by appointment]

**Course Description**

(4 cr. prereq CS 2511, FMIS 3201 or 2201 or SBE 1101, or #)

Design and development of database management systems. Emphasis on the relational data model, entity-relationship model, SQL, integrity constraints, relational database design, file structures, indexing, and query processing. Laboratory work is based on Oracle and/or Microsoft SQL Server.

**Required Textbook**

Ramez Elmasri, et. al. *Fundamentals of Database Systems, 6<sup>th</sup> Edition*, Addison Wesley, 2010.

**Course Goals**

The purpose of this course is to introduce you to the fundamental concepts underlying database system design, including not only the design of applications using databases but also the implementation techniques used in database systems. The amount of material that needs to be covered will make this course a rather intensive one for a one semester course; be prepared for the course load. We will attempt to cover 21 chapters either in lecture or lab sessions, including Chapters 1-9, 13-20, and 21-24. The course will be supplemented by assignments involving coding and executing SQL queries, creating database applications, and building graphical interfaces to databases.

**Tools**

We will use the Oracle relational database management system running under Unix, and if time permits, Microsoft SQL Management Studio and Digital Studio 2008. We have installed software and various databases on laptops that will be available to you in the lab. You may install the software on your own PC if you so desire. Instructions will be provided for doing this.

**Class Schedule**

Lectures on Tuesday/Thursday from 9:30-10:45. Labs will be held on Wednesday afternoons, 4:00-5:50, in HH 306. Lab attendance is mandatory. No classes or lab will be held during the first two weeks of class. Each Wednesday during the first part of the lab, the teaching assistant will introduce you to the use of various features of the lab's software tools and will discuss that week's lab assignment. You will then have 1 3/4 hours to complete or at least get a good start on the lab assignment that evening. Although most labs can be done during the formal lab period, the lab will be open and staffed by the TAs at various times during the week. Although it has not been finalized, the lab will be open 6:00-8:00 Tuesday and Wednesday and 4:00-6:00 on Friday.

**Final Exam Date**

04:00-5:55, December 19 (Monday)

**Grading Basis**

Assignments	
Laboratory/Homework	40%
Midterms (2) & Final	60%

**Grading Scale**

93-100	A	77-79	C+
90-92	A-	73-76	C
87-89	B+	70-72	C-
83-86	B	67-69	D+
80-83	B-	60-69	D
		<60	F

**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 lab assignments are due during the lab period on the due date and must be submitted in the lab – not to the TA or instructor outside the class period. **No credit will be given for late work.**

**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.

**Student Academic Integrity Policy**

Academic dishonesty tarnishes UMD's reputation and discredits the accomplishments of students. UMD is committed to providing students every possible opportunity to grow in mind and spirit. This pledge can only be redeemed in an environment of trust, honesty, and fairness. As a result, academic dishonesty is regarded as a serious offense by all members of the academic community. In keeping with this ideal, this course will adhere to UMD's Student Academic Integrity Policy, which can be found at [www.d.umn.edu/assl/conduct/integrity](http://www.d.umn.edu/assl/conduct/integrity). This policy sanctions students engaging in academic dishonesty with penalties up to and including expulsion from the university for repeat offenders.

**Student Conduct Code**

The instructor will enforce and students are expected to follow the University's Student Conduct Code (<http://www.d.umn.edu/assl/conduct/code>). Appropriate classroom conduct promotes an environment of academic achievement and integrity. Disruptive classroom behavior that substantially or repeatedly interrupts either the instructor's ability to teach, or student learning, is prohibited. Disruptive behavior includes inappropriate use of technology in the classroom. Examples include ringing cell phones, text-messaging, watching videos, playing computer games, doing email, or surfing the Internet on your computer instead of note-taking or other instructor-sanctioned activities.