

Department, Number, and Title of Course

Computer Science & Engineering, COP 4710, Database Design

Time and Location

ENC 1002 (Engineering III)

5:00pm-6:15pm, Tuesdays and Thursdays

Cyber location (course website) : www.cse.usf.edu/~ytu/teaching/COP4710_F09/

Grades/announcements will be posted on Blackboard (<http://my.usf.edu/>).

People

Instructor : Dr. Yicheng Tu
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Course Overview

This course covers the fundamentals of database and information systems: data models, database design, database management systems, and typical information systems. Specifically, the following topics will be discussed:

- Data modeling: physical, logical and conceptual data models
- The relational database model
- Relational query languages (SQL, QBE ...)
- Relational database design
- Database management system kernels: storage, query processing/optimization, transaction management
- Application development (two-tier, three-tier architecture...)
- Introduction to advanced topics: parallel and distributed databases, data mining, information retrieval, online analytical processing

Grades will be based on the performance on home works, implementation projects, course participation, and exams. There will be four programming projects in this course. The first three projects are to be finished by students individually and the last one is for groups of two. Five written assignments will be given. Plus, there is a 75-minute midterm exam, and a 2-hour final exam. The final exam is comprehensive but will focus on materials covered after the midterm.

Level, credits, and prerequisites

The course is senior level and three credits. The students must have completed Data Structures (EEL 4851) and be able to write non-trivial programs using at least one programming language. For those of you who do not meet the prerequisites, please contact the instructor immediately.

Textbook(s) and/or other material

Required:

A. Silberschatz, H. F. Korth, and S. Sudarshan. Database System Concepts. 5th Edition, McGraw-Hill, 2005 (ISBN 0-07-295886-3).

Optional:

R. Ramakrishnan and J. Gehrke. Database Management Systems. 3rd Edition, McGraw-Hill, 2003 (ISBN 0-07-246563-8).

The USF library has older versions of both books; they will be reserved for your study.

Grading and Attendance Policy

The grade break-down is as follows:

Midterm exam:	20%
Final exam:	20%
Implementation Projects:	40%
Assignments:	15%
Class contribution:	5%

Attendance to all lectures is expected, although the instructor will not take attendance in class. Your absence from classes will affect your class contribution, which is determined by factors beyond class attendance. These include: taking notes, answering cold-call questions, asking questions, bringing up interesting topics for discussions, taking part in discussions, etc.

Each student is expected to take, organize, and share notes for at least two lectures during the whole semester.

The break-down of the "Implementation projects" part is 5, 5, 5, and 25, with the last project carrying the most weight.

Final letter grades will (tentatively) be based on the following scheme:

A = 90% and above
B = 80% and above but lower than 90%
C = 70% and above, but lower than 80%
D = 60% and above, but lower than 70%
F = below 60%

Late Submissions, Makeup of Missed Work

Late submissions of assignments/projects will NOT be accepted. However, every student has a total number of THREE courtesy days for late submissions during the whole semester (use them wisely!). Missed exams can only be made up under truly exceptional circumstances with verifiable proof. As to missed work due to religious reasons, USF policy says "Students who anticipate the necessity of being absent from class due to the observation of a major religious observance must provide notice of the date(s) to the instructor, in writing, by the second class meeting." Note that our second class meeting will be on 08/27/2009.

Academic Honesty

Acts of academic dishonesty will be pursued according to USF policies. You are generally encouraged to discuss problems in homework/projects but not allowed to read others' code or solutions. If you are caught cheating, you will get a "FF" in this course and there is nothing the instructor can do about it.

Everyone is encouraged to read the following page regarding academic dishonesty and other course conducts: <http://homes.cerias.purdue.edu/~spaf/cpolicy.html>. Although it does not represent the

official standpoint of USF on these issues, it gives a comprehensive set of well-accepted “common sense” in the academic community.

Important Dates

Midterm: 10/08/2009, in-class

Final exam: 12/10/2009 (5:30 – 7:30pm, in ENC 1002)

Other Issues

- Students with disabilities are encouraged to contact the instructor before the first class meeting. If accommodations are needed, a letter from the Office of Student Disability Services (SVC113) will be required. Please let the instructor know if there is a need for alternate format for documents or a note taker.
- Check either the course website or Blackboard frequently for new announcements/updates. We will do our best to synchronize them. In case there are discrepancies between these two information sources, use the content in Blackboard.
- This syllabus is subject to change, but only with modifications that will make your job as a student easier.
- Do not record the lectures without the instructor’s permission.
- The students are required to turn off cell phones in the class and use laptops only when necessary.