
Course Information

CS 317 – Data Management and Information Processing
Spring Quarter 2004
T,Th 9:30-10:50AM, L361

Instructor: Goce Trajcevski, office # L580, TCH
Email(tentatively): goce@ece.northwestern.edu
Office hours: Tue. and Thu. 11:15-12:30
TAs: Bin Lin and Lin Qiu
Email: {binlin, qiu}@cs.northwestern.edu
TA's office hours – TBA ASAP

1 Textbook

- *Principles of Database Systems with Internet and Java Applications* by Greg Riccardi (Addison-Wesley publishers)

Additional Texts:

- *“Database Management Systems”* by R. Ramakrishnan and J. Gehrke (McGraw Hill)
- *“Database Systems – A Practical Approach to Design Implementation and Management”* by T. Connolly and C. Begg (Addison-Wesley)
- *“A First Course in Database Systems”* by J. Ullman and J. Widom (Prentice Hall)

2 Grading Policy

You should expect to have 2-3 homeworks which will cover approximately 10% of your grade. Also, you will have 2-3 projects which will cover about 20-25% of your grade. There will be two quizzes which will cover (yeah, again) approx. 15-20% of your grade. The midterm and the final exam will cover about 20% and 30% of your grade, respectively.

Please note that the grading policy is not “strictly” defined and is a subject to possible (minor) changes. However, on Monday of the last week of classes, the *final* grading policy will be presented. Also, at that time you will be asked to verify your grades (for each of the assignments) with your TA. After that, the record of your grades held by your TA becomes official.

Whenever you receive your graded assignments back in class, please resolve ANY possible ambiguity/conflict within 1 week. No claims, justifiable or otherwise, will be considered after that, and the record of the particular assignment's grade is considered final.

3 Course Outline

There are two “targets” of this course – breadth and depth. We will try to present as many as possible of the abstractions and concepts that are relevant for a *database* person to know and understand. However, due to the timing constraints, we cannot explore all of them in details. Therefore, the course will focus on some essential aspects of the data management and will try to present some other ones in a less detailed manner. After this course, you should be able to communicate with a database designer in an “almost peer” manner... The course will also attempt to get you somewhat close to understanding what are some of the issues involved in *databases* <-> *www* connection.

The tentative list of topics that we plan to cover includes:

- *Introduction and Motivation*
- *Modeling the Real World and ER Diagrams*
- *Modeling the Data – Relational Model*

- *Functional Dependencies and the Design Quality*
- *Manipulating Relational Data – SQL and QBE*

Time permitting, we will also attempt to address, in a “potpourri – like” manner, some issues related to query and transaction processing, distributed information systems and WWW, as well as some recent challenging applications of the database systems.

4 Remarks

Awareness: It is each student’s personal responsibility to keep him/herself up-to-date with any announcements made in class; sent via email or posted on the course’s page.

Collaboration: You should discuss the issues regarding the course with your colleagues. However, the homeworks; tests; and the programming assignments for this course are to be done *individually* (e.g. the entire code for the programming projects). Cheating on any kind of assignment and/or examination will result in failing the class and a possible dismissal from the university.

Incomplete Grades: The University/College/Department have a well defined policy pertaining to the IN grade for the course. It is available in any departmental handout. Therefore, please do not ask the instructor to give an IN grade because of the poor performance in class – it is against the regulations.