

CS 595-052 Data Management in Modern Distributed Systems

Fall Semester 2003

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Class Web Page: http://www.cs.iit.edu/~yee/course/cs595_f03.html

Meeting Time: Thursdays, 6:25-9:05 **Location:** Life Sciences 213

REFERENCE TEXT:

Principles of Distributed Database Systems, Ozsü and Valduriez, Prentice Hall, 1999

COURSE CONTENT:

This is a research-oriented course that focuses on data organization concepts and problems engendered by new systems and network architectures—e.g., peer-to-peer, client-server, ad-hoc, and sensor-based—common in today’s Internet and wireless systems. We will discuss research problems related to data organization, such as resource discovery, consistency control, and resource allocation.

Coursework consists of discussions of readings from recent conference proceedings and journals (on the order of 30 papers), student presentations, a research-focused project and report. Students taking this course are expected to have a knowledge of databases, networking, and systems.

CLASS STRUCTURE AND STUDENT RESPONSIBILITIES:

This class is discussion-oriented, and two to four papers will be covered in each class. A list of papers has been selected, but is open to change. A student scribe will be assigned to each paper. This student will spend 3 minutes describing the paper (descriptions will be posted on the Web) ahead of a group discussion on it. Paper descriptions are to be sent to the instructor a day ahead of each class for approval and posting on the Web. See the class Web page for scribing guidelines.

Besides scribing, students are responsible for two take home exams and a self-designed project. The goal of the take home exam is to ensure that students understand the material covered in class, while the project should encourage the student to explore deeper into the class topics.

TOPICS (subject to change):

- Web
- Peer to Peer
- Sensors
- Mobile Data Management

PROJECT:

Students are required to complete a project based on the topics covered in class. The goal of the project is to give the student a deeper understanding of the course material. The project is to be designed in cooperation with the instructor.

GRADING:

Grades are based on the two take home exams, the project and class participation. Each are worth a total of 25% of the final grade.

PREREQUISITES:

Knowledge of databases, systems and networks.

NOTABLE DATES:

Date	Event
Sept 18	Project proposal due.
Oct 16	No class (fall break). Project status report 1 due. Take home 1 assigned.
Oct 23	First take home due.
Oct 30	First take home returned.
Nov 6	Out of town.
Nov 13	Project status report 2 due.
Nov 27	No class (Thanksgiving).
Dec 4	Last day of class. Project due. Take home 2 assigned.
Dec 8-13	Exams.