## MIS 6326 Database Management Systems / AIM 6337 Data Strategy and Management Syllabus (Summer 2005)

Course: MIS 6326 Sec 521 (Call 11017) / AIM 6337 Sec 521 (Call 11401) Instructor: Young U. Ryu (972-883-4065, ryoung@utdallas.edu) Class Hours : M 6:00–10:00PM @ SOM 2.902 Office Hours : M 5:00–5:45PM or by appointment @ SOM 3.426

**Required Textbook**: Peter Rob & Carlos Coronel. *Database Systems: Design, Implementation, and Management* (6th Edition), Course Technology, 2004.

**Course Objective**: The main objective of the course is to understand relational database theories, industry standard SQL, and database design. A conceptual/semantic data modeling with the entity-relationship diagramming technique is also covered.

**Prerequisite**: Competence in personal computing (e.g., operating system/environment, word processing software, electronic spreadsheet, personal database software, network applications such as e-mail and World Wide Web).\*

## Grading:

- Exam 1 ...... 40% Exam 2 ...... 40%
- Final Group Project .... 15% Assignments....... 5%

Letter grades will be assigned based on the following formulae:

- A if total\_score  $\geq$  (median + 0.5 × standard\_deviation)
- B if  $(median 1.0 \times standard_deviation) \le total_score < (median + 0.5 \times standard_deviation)$
- C if  $(median 1.8 \times standard_deviation) \le total_score < (median 1.0 \times standard_deviation)$
- F if total\_score < (median 1.8 × standard\_deviation)

**Database Systems Software**: We will use Microsoft SQL Server as the main SQL platform. Microsoft Access will be the front-end to the server. We will also use Microsoft Visio as the data modeling tool.

Assignments: There will be one SQL assignment and one data modeling assignment. Late assignment returns are subject to penalties:

1 day late15% penalty2-3 days late30% penalty4-6 days late60% penaltyafter the 6th daynot accepted

- Assignments must be done by <u>individuals</u>, <u>not a group</u>; copying other students' assignments will be subject to the penalty prescribed by the University rules and the incident will be reported to the Dean of Graduate Studies.
- No hand-written reports will be accepted; they must be word-processed or type-written.
- Submission of assignment reports via e-mail, fax, or other electronic media is not acceptable.

**Group Project**: Students are expected to voluntarily organize groups of up to 5 people. Each group must select a problem, and use Microsoft Access (optionally with the Microsoft SQL Server) to develop a prototype database.

- No hand-written project report will be accepted; it must be word-processed or type-written.
- Submission of the project report via e-mail, fax, or other electronic media is not acceptable.

<sup>\* &</sup>quot;Competence in personal computing may be demonstrated in one of three ways: completing BA3351 with a grade of B or better, completing an equivalent course at another university with a grade of B or better, or passing an exemption exam." (UTD Graduate Catalog 2002–2004)

**Exams**: Two exams are <u>closed-book</u> in-class tests. Test questions may consist of multiple choice questions, short essay questions, and problem-solving questions. There will be no make-up exams, except for medical emergency (written statement justifying the situation from a physician required). The written statement should include the physician's address and phone number for the verification purpose.

**Class Notes**: Class notes will be available through the Internet World Wide Web. Details will be announced in the class.

**UTD EMail Policy**: As of August 1, 2004, all email correspondence with students will be sent *only* to the student's UTD email address. UTD provides each student with an email account that is to be used in all communication with university personnel. This allows UTD to maintain a high degree of confidence in the identity of all individuals corresponding and the security of the transmitted information. The Department of Information Resources at UTD provides a method for students to forward email from other accounts to their UTD address and have their UTD email sent on to other accounts.<sup>†</sup> Students may go to the UTD Net ID site (http://netid.utdallas.edu) to establish or maintain their official UTD computer account.

	Date	Text	Descriptions
1	5/16	Syllabus	Course Introduction
		Ch. 1	Database Systems
		Ch. 2	Data Models
		Ch. 3	The Relational Database Model
2	5/23	Ch. 4	Entity Relationship Modeling (ERD)
3	5/30	No Class	No Class—Memorial Day
4	6/6	Ch. 4	Entity Relationship Modeling (ERD)
5	6/13	Ch. 4	Entity Relationship Modeling (ERD)
		Ch. 5	<ul> <li>Normalization of Database Tables</li> </ul>
6	6/20	Ch. 6	Structured Query Language (SQL)
			Assignment 1 Due
7	6/27	Exam 1	• Chs. 1–5
8	7/4	No Class	No Class—Independence Day
9	7/11	Ch. 9	Transaction Mgmt and Concur. Control
		Ch. 12	The Data Warehouse
10	7/18	Chs. 6 & 7	Structured Query Language (SQL)
11	7/25	Chs. 6 & 7	Structured Query Language (SQL)
			• Assignment 2 Due (7/28)
12	8/1	Exam 2	• Chs. 6, 7, 9, 12
			Project Due

Schedule :

(The schedule may change.)

<sup>&</sup>lt;sup>†</sup> In order to have UTD mails sent to other accounts, refer to the following document provided by Information Resources: http://www.utdallas.edu/ir/tcs/training/documents/EmailForwarding.doc.