CSE 345 (#16058) / CIT 345 (#16059): DATABASE DESIGN AND IMPLEMENTATION

TO: CSE 345 / CIT 345 STUDENTS AND SECS FACULTY
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OFFICE: 146 DHE
OFFICE HOURS: MONDAY: 11:30-1:00PM

SUBJECT: COURSE OBJECTIVES AND PROCEDURES
DATE: JANUARY 5, 2007

TEXTS: ULLMAN & WIDOM, A FIRST COURSE IN DATABASE SYSTEMS, 2ND.EDITION, PRENTICE HALL, 2002
ISBN: 0-13-035300

BOOK WEB SITE: http://www-db.stanford.edu/~ullman/fcdb.html
CLASS TOKEN: 3B03054F

Objectives: Upon the completion of the course, a successful student will be able to:

♦ Understand Database Systems Architecture.
♦ Model data-applications using Entity Relationship Diagrams (ERD).
♦ Apply Data Definition Language (SQL-DDL) for transforming a schema into relational database.
♦ Identify Functional Dependencies and normalization constraints to remove anomalies.
♦ Specify develop data retrieval procedures using Relational Algebra and Relational Calculus.
♦ Construct data retrieval procedures using a SQL.
♦ Use Java's Call Level Interface (CLI) using JDBC for application and database interaction.
♦ Develop stored Procedures and Triggers.
♦ Understand concurrency and Transactions.
♦ Apply the theoretical knowledge to develop a Working Database Application.

Grade Distribution:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes (5)</td>
<td>20%</td>
</tr>
<tr>
<td>Mid Term</td>
<td>15%</td>
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<tr>
<td>Final</td>
<td>30%</td>
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<tr>
<td>Projects (4)</td>
<td>25%</td>
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**Homework:** Homework problems are specified a week before.
Quizzes: Five quizzes – each with approximately two problems similar to the homework problems. Best four will be considered.

Project: There will be four projects requiring the use of Oracle database and Java.

Grade Assignment: Grade = (Score / 25) + 0.20

Academic Conduct
Academic integrity means representing oneself and one's work honestly. Following are some examples of academic dishonesty:

1. Cheating on examinations. This would include using materials such as books and/or notes when not authorized by the instructor; copying from someone else's paper; helping someone else copy work; substituting another's work as one's own; theft of exam copies; or other forms of misconduct on exams.

2. Plagiarizing the work of others. Plagiarism is using someone else's work or ideas without giving that person credit.

3. Cheating on lab reports by falsifying data or submitting data not based on the student's own work.

4. Falsifying records or providing misinformation regarding one's credentials.

5. Unauthorized collaboration on assignments. This includes computer assignments and unauthorized access to and use of computer programs, including modifying computer files created by others and representing that work as one's own.

Individual (unaided) work on exams, lab reports, computer assignments, and documentation of sources is expected unless the instructor specifically states in the syllabus that it is not necessary. If the instructor assigns a special project other than or in addition to exams, such as a research paper or original essay or a book review, the instructor intends that work to be completed for his/her course only. Work students may have completed for a course taken in the past, or may be completing for a concurrent course, must not be submitted in both courses unless they receive permission to do so from both faculty members.