CONTACT INFORMATION
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TEXTBOOK
Title: Database Systems: Design, Implementation, and Management
Authors: Coronel / Morris
Year: 2015
Publisher: Course Technology, Cengage Learning
Student Edition:
Instructor Edition:

COURSE ORIENTATION AND CONTENT
The course presents data modeling and database concepts from the systems analyst’s and system developer’s points of view. These orientations are reflected in the emphasis given to the analysis of data requirements in an environment for which a database is designed as opposed to the technical issues of database administration. Themes covered include: classification of data environments, data analysis and semantic data modeling, entity-relationship model, semantic object data model, relational data model and relational languages, relational design, relational database implementation and querying exercise, database specifications, database administration, database design process, data warehousing, on-line analytical processing, data mining, and data visualization. Discussions and exercises enhance lectures.

BEHAVIORAL OBJECTIVES
Upon completing this course the student will:
● Be able to analyze an environment and derive its semantic data model
● Be able to describe, without notes, a process of database analysis and design
● Be able to evaluate and refine (normalize), without notes, the structures of data
● Be able to describe existing database models
● Understand the conversion of a semantic data model into an implementation data model and be able to perform the mapping from an Entity-Relationship model and Semantic Object model to a relational data model
● Be able to implement and query a relational database using SQL (Structured Query Language)
● Understand new trends in data management and analysis
GRADING

Final grades will be determined on the basis of 25% each for the midterm and final examinations, 20% for homework assignments, 20% for computer assignments, and 10% for class participation.

Homework assignments will be given regularly.

The following table will be used in converting your numeric grade into an official letter grade for the course:

<table>
<thead>
<tr>
<th>Number Scale</th>
<th>Letter Grade</th>
<th>Number Scale</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>95.000% and above</td>
<td>A+</td>
<td>75.000% - 79.999%</td>
<td>C+</td>
</tr>
<tr>
<td>93.000% - 94.999%</td>
<td>A</td>
<td>73.000% - 74.999%</td>
<td>C</td>
</tr>
<tr>
<td>90.000% - 92.999%</td>
<td>A-</td>
<td>70.000% - 72.999%</td>
<td>C-</td>
</tr>
<tr>
<td>85.000% - 89.999%</td>
<td>B+</td>
<td>65.000% - 69.999%</td>
<td>D+</td>
</tr>
<tr>
<td>83.000% - 84.999%</td>
<td>B</td>
<td>63.000% - 64.999%</td>
<td>D</td>
</tr>
<tr>
<td>80.000% - 82.999%</td>
<td>B-</td>
<td>60.000% - 62.999%</td>
<td>D-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>00.000% - 59.999%</td>
<td>F</td>
</tr>
</tbody>
</table>

Grades will not be curved. You will know your grades early and often, thus there should be no surprises at the end of the semester.

THOUGHTS ON GRADES

Evaluating academic performance is a complex and difficult process. While people cannot be “pigeon-holed”, they can be judged on the basis of their achievements. Grades reflect both effort and achievement, not effort alone. The following description (adapted from Williams, John, W. Clarifying grade expectations. The Teaching Professor, 1993) typifies the participation and achievement levels expected in this course from an "A" student.

Attendance: "A" students have perfect attendance. Their commitment to the class resembles that of the teacher.
Participation: "A" students are prepared for class. They always read the assignment. Their attention to detail is such that they occasionally catch the teacher in a mistake.
Curiosity: "A" students show interest in the class and in the subject. They look up or dig out what they don't understand. They often ask interesting questions or make thoughtful comments.
Retention: "A" students have retentive minds. They are able to connect past learning with the present. They bring a background with them to class.
Attitude: "A" students have discipline. They have both the determination and the self-reliance necessary for success. They show initiative. They do things they have not been told to do.
Talent: "A" students have something special. It may be exceptional intelligence and insight. It may be unusual creativity, organizational skills, commitment - or a combination thereof. These gifts are evident to the teacher and usually to the other students as well.
Results: "A" students make high grades on tests - usually the highest in the class. Their work is a pleasure to grade.

Commit yourself to excellence and have a great semester!!

INSTRUCTIONAL APPROACH

Class sessions will consist of lectures, discussions, and practice sessions during which the theories will be applied to classroom-size problems. Student participation will be encouraged (please note class participation in the Grading section). Exercises assigned for homework will also be discussed. Homework solutions will sometimes be presented and discussed as well as criticized.

Attendance at scheduled classes is expected. If you are absent, you are still expected to make arrangements to submit your written assignments when they are due, to obtain the following week's assignments, and to do them and submit them by the assigned due date. One absence can adversely affect the comprehension at multiple classes unless you plan ahead and/or recover quickly.

There are no make-up classes.
HOMEWORK AND RESEARCH ASSIGNMENTS
Assignments will (may) consist of:

- Readings from the text (see course schedule)
- Selected supplemental readings (if any are assigned)
- Written assignments for each class, consisting of selected questions, problems and exercises assigned in class

All written assignments must be in typed form (except when noted differently or when diagrams or drawings are requested). They are expected on their due date. Penalty for late submission is as follows: each day 10% grade reduction; after the homework is discussed in the next class 100% grade reduction. Some assignments may require the use of the DePaul University computer facilities. They will not be extensive and should normally be finished in a single session. Details will be provided in class.

The header section for each page of your homework must provide the information as indicated in the Homework Assignment Format below.

HOMEWORK ASSIGNMENT FORMAT
Please include the following on every single page of all materials turned in:

- Full Name
- Current Date
- Date Due
- Name of Assignment
- Page Number

For anything turned in with multiple pages, please staple the pages together. Do not use a paperclip, as they have a tendency to get dislodged.

Without the above information, you are opening yourself up to receiving no credit for the assignment.

ACADEMIC INTEGRITY
Academic integrity is a serious issue and violations will not be tolerated. Any student found cheating or plagiarizing on assignments will receive a grade of F for the course and will be subject to disciplinary action under the DePaul University regulation. Please review the DePaul University statement on Academic Integrity (http://academicintegrity.depaul.edu/).

COURSE OUTLINE
Following is a course schedule; it may need to be adjusted to advance the learning process. The students are expected to read the topics to be covered on a particular night before coming to the class except for the first night.

<table>
<thead>
<tr>
<th>Class #</th>
<th>Date</th>
<th>Chapters Covered</th>
<th>Homework Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>01/08/2015</td>
<td>Ch. 1 – Database Systems (All)</td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>01/15/2015</td>
<td>Ch. 2 – Data Models (All)</td>
<td>1. Send Welcome e-Mail</td>
</tr>
<tr>
<td>03</td>
<td>01/22/2015</td>
<td>Ch. 3 – Relational DB Model (All)</td>
<td>2. Install/Test SQL Server</td>
</tr>
<tr>
<td>04</td>
<td>01/29/2015</td>
<td>Ch. 4 – E-R Modeling (All)</td>
<td>E-R Diagram &amp; Mission Statement</td>
</tr>
<tr>
<td>05</td>
<td>02/05/2015</td>
<td>Ch. 5 – Advanced Data Modeling (5.3)</td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>02/12/2015</td>
<td>Ch. 6 – Normalization (All)</td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>02/19/2015</td>
<td>Midterm Examination (Covers Everything)</td>
<td>Normalized Version</td>
</tr>
<tr>
<td>08</td>
<td>02/26/2015</td>
<td>Ch. 7 – Introduction to SQL (All)</td>
<td></td>
</tr>
<tr>
<td>09</td>
<td>03/05/2015</td>
<td>Ch. 7 &amp; 8 – Introduction to SQL &amp; Advanced SQL (All)</td>
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<tr>
<td>10</td>
<td>03/12/2015</td>
<td>Ch. 8 – Advanced SQL (All)</td>
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</tr>
<tr>
<td>11</td>
<td>03/29/2015</td>
<td>Final Examination (Covers Everything, but mostly 2nd half)</td>
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