INFO 210 Database Management Systems

Summer 2012

Course Syllabus

Instructor: Il-Yeol Song, Ph.D.
Time & classroom: Monday 6:00-8:50PM, Rush Building 009
Course Website: http://learn.dcollege.net

Email: song@drexel.edu (Please put INFO210 in the email subject)
Home page: http://www.ischool.drexel.edu/faculty/song/
Office: Rush Building 332, Phone: 215-895-2489
Office hours: Monday 5:00-6:00PM or by appointments
TA: Swathi Jagannath [swathijagan@gmail.com]

COURSE DESCRIPTION

INFO 210 is the first course in the database sequence. The purpose of this course is to introduce the students to good database design and implementation in a relational database system with SQL. This includes understanding underlying principles and hands-on experience with the standard database query language, SQL. Topics include database design techniques, entity-relationship model (ERD), relational model, techniques of translating an entity-relationship model into a relational model, structural query language (SQL), and normalization techniques.

COURSE MATERIALS

Textbook (Required)
Authors: Carlos Coronel, Steven Morris, and Peter Rob
Publisher: Course Technology
For this class purpose, 9th edition of the textbook is also fine.

Recommended (or any web resources are fine)
Title: Oracle Database 11g -- The Complete Reference, 2009.
Authors: Kevin Loney
Publisher: McGraw-Hill (Osborne)
ISBN: 0071598758

Author: Jonathan Gennick
Publisher: O’Reilly & Associates
Lecture slides will be available on the Blackboard Learn after classes. Lectures will be recorded and can be viewed from Blackboard Learn.

### Oracle and Visio:

- For SQL assignments, you may use the IST Oracle system or you may use your own copy
- Request an IST Oracle ID at URL: [https://linux.ischool.drexel.edu/signup/index.pl](https://linux.ischool.drexel.edu/signup/index.pl)
  When prompted for your Drexel University Email ID and PW, you should use the short version of their Email ID (such as abc22) and the PW that goes with that account. If you require any assistance, contact the iCommon by emailing ihelp@drexel.edu.

- **Downloading your own personal edition of Oracle 10g Express:**
  - Visio: Get a recent copy of MS Visio; You will automatically receive an email from “DreamSpark MSDNAA” account that you can download a recent copy of Visio software. The email will be sent you on Monday (June 25) afternoon. You will use Visio to develop Entity-Relationship Diagrams (ERDs) for exercises, assignments, and term project. (If you already have a Visio, the old version is sufficient for this class purpose.) From the website, you may also download other MS software such as SQL Server. If you require any assistance for downloading Visio, contact the iCommon by emailing ihelp@drexel.edu by sending your name, email address, and course (INFO 605) information.

If this is their first time getting an account, The email will come from “Drexel University - The iSchool - DreamSpark Premium noreply@e-academy.com” with the subject of “An Account has been created for you”.

Alternately if you already had an account, they will get the following message with the subject of “Your account has been reactivated”.

### GRADING Component:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>30%</td>
</tr>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Letter Grading

The grading scale for this course is as follows:

98-100  A+
93-97    A
90-92    A-
87-89    B+
83-86    B
80-82    B-
77-79    C+
73-76    C
70-72    C-
67-69    D+
63-66    D
60-62    D-
below 60  F

COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Topic</th>
<th>Reading Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>General Introduction</td>
<td>Ch 1 &amp; 2</td>
</tr>
<tr>
<td>Week 2</td>
<td>Relational Model</td>
<td>Ch 3</td>
</tr>
<tr>
<td>Week 3-4</td>
<td>ER Modeling</td>
<td>Ch 4 &amp; 5</td>
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<tr>
<td>Week 5</td>
<td>Exam1, Adv. ER Modeling</td>
<td>Ch 5</td>
</tr>
<tr>
<td>Week 6-9</td>
<td>SQL</td>
<td>Ch 7 &amp; 8</td>
</tr>
<tr>
<td>Week 10</td>
<td>Normalization &amp; Review</td>
<td>Ch 6</td>
</tr>
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Important dates:

- Project proposal: 3rd week, July 9 (10% of your project grade)
- Mid term: 5th week, July 23
- Project due: 6PM of Wednesday of Exam week, September 5 (I will create a link for each team to submit in Blackboard)
- Final Exam: Sept 3, 6:00-7:30PM.

Exams:

There will be two exams per the schedule noted. Exams must be taken on the scheduled date; no make-up exams will be given unless arrangements are made in advance, or unless a written note (e.g., from a doctor) is supplied. All exams will be closed book. A missed exam for any reason not deemed legitimate results in a score of zero.
If at the beginning of the course, you know you will have to miss any exam and/or many classes, it would be better for you to take this course in the future. Dishonesty on any exam also results in a score of zero, and possibly, a failing grade for the course.

Assignments:
There will be several assignments. All the written parts must be word-processed and all the diagrams must be developed by a drawing tool such as Visio. No handwritten work will be accepted or counted for grading. I strongly suggest that you complete these assignments faithfully, since the exams will be based largely on the subjects treated in the homework. All the assignments must be submitted at the start of each class on or before the due date. No late homework will be accepted once answers are discussed in the class or unless arrangements are made in advance. Remember all the assignments MUST be done individually. You must not discuss or share the assignment answers with your classmates. See the Plagiarism Policy below.

Term Project:
The term project will be the highlight of the course. Students will be required to do a group project, in a group of 3-4, but no more than 4. The project consists of creating database requirements, creating ERD & relational schema, and SQL implementation. Projects can be done in Oracle. More details on the project topics and submission requirements will be discussed in Week 2. Project Proposals are due on Week 3. Submission of the proposal on time with a good structure will carry 10% of your project grading. The project itself is due on Tuesday of the exam week.

Attendance & Participation:
Students are expected to attend and participate in each class session. Absence for medical reasons or equivalent verifiable emergency is the only exception that will be made. If you miss a class, get a copy of the class notes from me (or from Blackboard) and study from the captured class video posted on the Blackboard.

Attendance is accounted for by your signature on the sign-up sheet handed out at the beginning of the class. Leaving in the middle of the class or arriving after 15 minutes late without an advanced notice will carry only half credit of each attendance.

Participation Grading

(1) Attendance will be checked in every class. The rules are:
   IF you miss ONE class, full 10%
   IF you miss TWO classes, 9%
   IF you miss THREE classes, 8%
   IF you miss FOUR or more classes, 0%
   IF you miss FIVE, you get grade F, regardless of your scores in assignments and exams.
   
   Each attendance is defined as at least half of a class session.

- Class participations and supports are noticed and reflected in the grade

   Behaviors affecting your Participation grade:
- Talking with next students in the class for other topics not being in discussion
- Using notebooks/computers during lecture for emails or other web surfing
- Playing with cell phone/iPOD/PDA in the class
- Any other behavior that hurts class environments
- For the above issues, you will be excused only once; from the second notice, there will be -1 for each notice. There could be more than one notice in a single class session, if the behavior persists.
- (Nodding is allowed, though)

**Class Civility:**

Please observe proper classroom etiquette to demonstrate respect for your classmates and the class:

- Turn off cell phones and pagers before class begins.
- Arrive on time. Late arrivals pattern is noted and accounted for. Arrival on time is very important not to lose important discussions, especially when answers to assignments are discussed.
- Late Arrivals – Do not disturb the class.
- Sleepy? – Make faces and pull down ear balls; Stretch your legs; stretch your arms over your head, massage your back necks and heads. Sit straight; do not lean back.

**Plagiarism Policy:**

Plagiarism is the representation of another’s words, ideas or work as your own. The standards for academic honesty are described in Student Handbook and on Drexel website. All students are responsible for reading and understanding these rules. **Do not show/pass either soft copy or hard copy of assignments. You can discuss lecture materials, but you cannot discuss assignments with your classmates. You cannot co-develop a part or the whole solution. Once caught, both parties will suffer.**

For this course, all assignments are individual efforts and **only the project** is a joint effort venture.

All submissions should be the original work; any exchange, reuse or direct submission of other’s work (documents, code etc) as your own or as your team’s is Plagiarism.

For this course, **students found guilty of plagiarism can expect one or more or all of** -

(a) Incident being reported to the University Judicial Office, where a permanent record is maintained, and

(b) Fail the course.

**STUDENTS WITH DISABILITIES**

If you have any type of disability which will interfere with your participation and comprehension in this class, or with completion of assignments, please contact the Office of Disability Services as soon as possible. Student with disabilities requesting accommodations and services at Drexel University need to present a current accommodation verification letter (AVL) to faculty before accommodations can be made. AVL’s are issued by the Office of Disability Services (ODS). For
additional information, contact the ODS at http://www.drexel.edu/ODS, 3201 Arch St., Ste. 210, Philadelphia, PA 19104, Phone 215-895-1401.

**DB Magazines and Web Sites:**

<table>
<thead>
<tr>
<th>Title</th>
<th>URL</th>
<th>Free Subscription?</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Database Trends and Applications</em></td>
<td><a href="http://www.dbta.com">http://www.dbta.com</a></td>
<td>Yes</td>
</tr>
<tr>
<td><em>Information Management</em></td>
<td><a href="http://www.information-management.com/">http://www.information-management.com/</a></td>
<td>Yes</td>
</tr>
<tr>
<td>Oracle Magazine</td>
<td><a href="http://www.oramag.com">http://www.oramag.com</a></td>
<td>Yes</td>
</tr>
<tr>
<td><em>Application Development Trends</em></td>
<td><a href="http://www.adtmag.com">http://www.adtmag.com</a></td>
<td>Yes</td>
</tr>
</tbody>
</table>

- **How to make A+ in this class?**