I. General Information
Time/location: MW 4:00pm-5:15pm, CS-111
Professor: Dr. Longzhuang Li
Office: CI-323
Office hours: MW, 11:00am - 12:00pm, or by appointment
Phone: (361) 825-2406
Email: Longzhuang.Li@tamucc.edu
http://www.sci.tamucc.edu/~lli/teaching/Fall2010/cosc5336/cosc5336.htm
Prerequisite: COSC 5335 and COSC 5321

II. Catalog description
Data integration has been recognized as a research topic of big practical importance. The availability of integrated data from multiple independent, heterogenous data sources is crucial for many applications. Data integration requires combining and matching information in different sources, and resolving a variety of conflicts. With the number of data sources growing very quickly, data integration is bound to become even more important in the future. This course will survey selected theoretical and practical issues arising in data integration. Also includes the study of contemporary database management system concepts, terminology, and methodology for design, use, and implementation. Emphasis is on the relational model.

III. Student Learning Outcomes
Upon successful completion of this course, a student will
• comprehend the essential principles of the design, analysis and use of contemporary DBMS systems;
• be able to implement Web database applications that interact with a back end DBMS;
• be familiar with techniques associated with data integration;

IV. Course Evaluation
The course grade will be determined as follows:
   Project and term research paper 45%
   research paper presentation 15%
   exams (2) 30%
   class attendance and participation 10%

V. Late Submissions
Late submissions are allowed but penalties apply. Late submissions will receive a 10% penalty each day.

VI. Class Attendance
Class attendance is strongly encouraged. Good attendance and class participation will count up to 10% in the final grade. Five or more unexcused absences will make the student ineligible for this 10%. If the student is absent from class, he or she is responsible for any materials covered, handouts and any announcements made in class, regarding (but not limited to) class schedule, homework, project and exams.
VII. Tentative Class Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review the basics of DBMS</td>
</tr>
<tr>
<td>2</td>
<td>Overview of data integration</td>
</tr>
<tr>
<td>3 - 6</td>
<td>Meditor-based integration techniques</td>
</tr>
<tr>
<td>7</td>
<td>Schema matching methods</td>
</tr>
<tr>
<td>8 - 10</td>
<td>Peer-to-peer based data integration</td>
</tr>
<tr>
<td>11</td>
<td>Data archive techniques</td>
</tr>
<tr>
<td>12 – 13</td>
<td>Dataspace</td>
</tr>
</tbody>
</table>

VII. Collaboration Policy
All assignments and projects must be completed individually, if they are not assigned to teams. On individual assignments, the students may ask each other for general advice, but they may not share final answers.

VIII. Academic Dishonesty
The student is expected to avoid all forms of academic dishonesty as defined in the Catalog. In addition, students are expected to behave in an ethical manner in all class and project activities. If the student feels uncertain about a particular activity, he/she should speak to the professor BEFORE problems arise.

*Notice to Students with Disabilities*: Texas A&M University-Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Services for Students with Disabilities Office, located in Driftwood 101, at 825-5816. If you need disability accommodations in this class, please see me as soon as possible.

**ACADEMIC ADVISING**: The College of Science and Technology requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College's Academic Advising Center is located in Faculty Center 178, and can be reached at 825-6094.

*** Grade Appeal Process.*** As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html). For assistance
and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

*Note: Any changes to the syllabus will be announced in class. It is the student's responsibility to obtain this information.