BITM 520 (7543): Database Management (1 credit)

In a modern organization, data is collected from and stored in multiple devices that can be standalone or connected together. This course will enable students to understand how data is managed in organizations including acquisition, storage, analysis, and visualization. These will include the role of data as a corporate resource, data models, elements of database design and implementation. This class will also cover some key elements of data security that managers need to know.

Class Details:  
F 12/6 & 12/13  
02:00 PM – 08:30 PM  
SA 12/7 & 12/14  
09:00 AM – 04:30 PM

Instructors:  
Sanjay Goel  
goel@albany.edu  
518-956-8323  
William Augustine  
waugustine@albany.edu

Assistant Instructor:  
Damira Pon  
damira@gmail.com

Office Hours: by appointment

Prerequisites: None  
Enrollment requires permission from Don Purdy and is intended for members of the Weekend MBA program.

Textbook:  
No specific textbook is assigned to the course.

Website: http://www.albany.edu/~goel/classes/fall2013/itm520/

Readings:  
For 12/13:  
TJX Case: "The TJ Maxx Credit Card Incident"  
http://tlotzke.myweb.usf.edu/tjx_creditcard.pdf | "Analyzing the TJ Maxx Data Security Fiasco"  
http://www.nysscpa.org/printversions/cpaj/2008/808/p34.htm

Big Data Case: "Making Advanced Analytics Work for You"  
http://students.kennesaw.edu/~gwilso29/hbr.pdf

For 12/14:  
Data Mining Case: "How Companies Learn Your Secrets"  
http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html

Email:  
It is important for all course students to have an Internet-based e-mail account for this class. Students may use a University account or their own personal account.
Assessment: A-E graded course
Your achievement of these objectives will be assessed through individual/group assignments and exams

Class Attendance
You are expected to attend all classes and are responsible for all material covered and/or course changes addressed in lecture.

Course Objectives:
By the end of the course you should be able to:
1. Identify different types of storage methods for organizational data
2. Create an Entity-Relationship Diagram for database development
3. Analyze SQL queries for accessing database information
4. Develop a social media strategy, vendor analysis, and risk strategy
5. Identify security implications of data and analyze data security risks
6. Understand how data mining and data warehousing can support business needs

Academic Honesty:
Students are expected to understand and abide by the University Standards of Academic Integrity. http://www.albany.edu/studentconduct/27179.php

Data Sets for the Course can be Found:

Assignments (Projects):
Because of the compressed time frame for this course, no late submissions will be accepted.

<table>
<thead>
<tr>
<th>GRADING RUBRIC</th>
<th>% of Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Media Group Project</td>
<td>40%</td>
<td>Case to analyze social media strategy and design database</td>
</tr>
<tr>
<td>ER-Diagram</td>
<td>10%</td>
<td>Hospital problem (individual assignment)</td>
</tr>
<tr>
<td>Quizzes / Assignments</td>
<td>50%</td>
<td>Quizzes conducted in class. Assignments may be in-class or at-home</td>
</tr>
</tbody>
</table>

“Great” Expectations:

- Students can expect the instructor to be open to questions and concerns, but remain impartial and fair to all students.
- Students are expected to respectfully participate in class and communicate with the instructor if there is confusion or lack of understanding of the material. In turn, the instructor will attempt to clarify any material either in-class or outside of class.
• If the instructor is unable to attend class or office hours due to a personal emergency, students can expect for arrangements to be made for an alternate instructor or to be informed in as a timely a manner as possible via email/phone.
• Students are expected to provide reliable contact information and inform the instructor of any updates.
• Students are expected to contact the instructor via email, phone, or in person for reliable response. Blackboard will NOT be considered a reliable communication method.
• Students are expected to complete all assignments and readings as well as attend office hours as necessary. It is important for students to inform the instructor if all available office hours interfere with other classes during the first week of class.

<table>
<thead>
<tr>
<th>Date</th>
<th>Lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/6</td>
<td><strong>Lesson 1: Database Fundamentals</strong> &lt;br&gt;Data in Organizations (DIKW Hierarchy) &lt;br&gt;Case: Competitive Advantage? Nicholas Carr, “IT Doesn't Matter”&lt;br&gt;RDBMS and Database Design (E-R Diagrams, Normalization, SQL)&lt;br&gt;Class Assignment</td>
</tr>
<tr>
<td>12/7</td>
<td><strong>Lesson 2: Database Design</strong>&lt;br&gt;Entity Relationship Diagrams&lt;br&gt;SQL in a Nutshell&lt;br&gt;Social Media Strategy of firms and data management (Case)</td>
</tr>
<tr>
<td>12/13</td>
<td><strong>Lesson 3: Managing Data in Organization</strong>&lt;br&gt;2:00 – 3:30 – Presentations on Social Media Case&lt;br&gt;3:30 – 3:45 – Break&lt;br&gt;3:45 – 5:00 – Information Security / TJMaxx Case&lt;br&gt;5:00 – 5:30 – Dinner&lt;br&gt;5:30 – 6:30 – Big Data /&lt;br&gt;6:30 – 6:45 – Break&lt;br&gt;6:45 – 8:00 – Document Management</td>
</tr>
<tr>
<td>12/14</td>
<td><strong>Lesson 4: Data Analysis</strong>&lt;br&gt;9:00 – 10:00 – Exam covering previous material&lt;br&gt;10:00 – 11:00 – Data Mining&lt;br&gt;11:00 – 11:15 – Break&lt;br&gt;11:15 – 12:15 – Data Mining / “How Companies Learn Your Secrets” Case&lt;br&gt;12:15 – 1:00 – Lunch&lt;br&gt;1:00 – 2:30 – Data Warehousing&lt;br&gt;2:30 – 2:45 – Break&lt;br&gt;2:45 – 4:00 – Data Warehousing</td>
</tr>
</tbody>
</table>

This schedule is subject to change and students are expected to be aware of any modifications to including, but not limited to: due dates, readings, exam dates, and project guidelines, either announced in-class and through email.