MIST 7770
Data Warehousing and Mining
Spring Semester, 2009

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Office Hours: M&W 1:00-2:45
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Course Description:

A data warehouse is a specially prepared repository of data designed to support decision making. Data are extracted from source systems, transformed, and loaded into the data warehouse. Then the data is accessed by users or applications that draw data from the warehouse. Data mining is an important use of a data warehouse.

This course is designed to provide a thorough understanding of the business potential of data warehousing, how to build and maintain data warehouses, and how to use data warehouses for business advantage. These objectives are met through a combination of class lectures, readings, case studies, software assignments, and outside speakers. The focus is more on the business than the technical aspects of data warehousing.

Course Prerequisites:

It is helpful, but not required, for students to have taken a database course, or have previous database work experience.

Course Materials:

Most of the course materials are available on the Teradata Student Network. Its URL is http://www.teradatastudentnetwork.com. The password to access materials is smartdecisions (not case sensitive). Other materials are available on Blackboard.

Blackboard:

Blackboard is used as the learning platform in the course. Its functionality includes the ability to post materials, make announcements, and communicate with individuals and groups. Its URL is http://terry.blackboard.com. Your ID is the same as your UGA MyID. For example, sarah@uga.edu would have a userid of sarah. Blackboard passwords are set by default to the first eight digits of your UGA ID number. Information about Blackboard can be accessed at http://www.terry.uga.edu/oit/is/
Course Grading:

Student performance will be evaluated on the following basis:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Class Participation and Assignments</td>
<td>25%</td>
</tr>
<tr>
<td>Software Project</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>60%</td>
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<td></td>
<td>100%</td>
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Class Participation:

Students are expected to attend all class sessions unless excused. Class attendance should be given priority over other activities, such as interviewing. “A” students must attend all classes and actively provide thoughtful, relevant comments to class discussions.

Homework Assignments:

Students are expected to complete all assignments on time.

Software Project:

Students are expected to successfully complete a software project.

Final Exam:

The final exam is given during the final regular class period and covers all course materials, as shown in the Class Assignments/Activities sheet. The final exam contains both objective (e.g., T/F, multiple choice) and essay questions.

Caveat:

At the Instructor’s discretion, minor changes may be made to the course specifications and requirements during the term.
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity/Assignment</th>
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</thead>
<tbody>
<tr>
<td>March 16</td>
<td>• Introduction to the course</td>
</tr>
</tbody>
</table>
            | • Watson, “Three Targets for Data Warehousing, *Business Intelligence Journal,* December 2006. (available on the Teradata Student Network)  
            | • Watson and Volonino, “Harrah’s High Payoff from Customer Information,” The Data Warehousing Institute. (available on the Teradata Student Network)  
            | • Optional Reading: Goodhue and Wixom, “3M Moves to a Customer Focus Using a Global Data Warehouse,” The Data Warehousing Institute. (available on the Teradata Student Network)  |
| March 23   | • Saunders, “Cooking up a Data Warehouse,” *Business Intelligence Journal,* (forthcoming). (available on Blackboard)  
            | • Optional Reading: Watson, Wixom, Buonamici, and Revak, "Sherwin-Williams' Data Mart Strategy: Creating Intelligence Across the Supply Chain,” *Communications of AIS,* April 2001. (available on the Teradata Student Network)  |
| March 30   | • Eckerson, "Data Profiling: A Tool Worth Buying (Really)," *DM Review,* June 2004. (available on the Teradata Student Network)  
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1998</td>
<td>Privacy at TeenStyle assignment due</td>
</tr>
</tbody>
</table>
| April 1  | • Eckerson, "Data Quality and the Bottom Line," The Data Warehousing Institute, 2002. (available on the Teradata Student Network)  
| April 6  | • Brobst, “Delivery of Extreme Data Freshness with Active Data Warehousing,” *Journal of Data Warehousing*, Spring 2002. (available on the Teradata Student Network)  
           • *Guest Speaker: Ron Swift, Teradata* |
| April 8  | • Davenport, Cohen, and Jacobson, "Competing on Analytics," Babson Executive Education, 2006. (available on the Teradata Student Network)  
| April 13 | • Kimball, “A Dimensional Manifesto,” *dbmag.com*, 1997 (available on Blackboard)  
           • *Guest Speaker: Matt Givern, Proviti* |
| April 15 | • Tableau Product Tour. (available at http://www.tableausoftware.com/products/tour) |
           • Optional Reading: Imhoff, "Predicting the Future -- A Crystal Ball for Your Enterprise," *DM Review*, August 2004. (available on the Teradata Student Network)  
           • Dimensional modeling assignment due |
| April 22 | • Data mining lab and assignment  
           • Shearer, “The CRISP-DM Model,” The New Blueprint for Data Mining, “*Journal of Data Warehousing*, Fall 2000. (available on the Teradata Student Network) |
| April 27 | • Watson, Fuller, and Ariyachandra, “Data Warehouse Governance at Blue Cross and Blue Shield of North Carolina,” *Decision Support Systems*, October 2004. (available on the Teradata Student Network)  
           • Watson, “Bridging the Gap between the IT and Business Cultures,” *Business Intelligence Journal* (available on Blackboard)  
           • Optional Reading: Adleman, “Ten Worst Practices of the Unsuccessful Data Warehouse Project Manager,” 2008. (available on
<table>
<thead>
<tr>
<th>Date</th>
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</tr>
</thead>
<tbody>
<tr>
<td>April 29</td>
<td>• Review for final exam&lt;br&gt;• Course evaluations&lt;br&gt;• Software Project due&lt;br&gt;• Data warehousing failures assignment due</td>
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<tr>
<td>April 30</td>
<td>• Final Exam</td>
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