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INFO 358-84 Data Modeling and Management

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INFO 358-84: Data Modeling and Management
Summer Session, 2009 (MW, 6:00-9:15pm, 7/6-8/14/09)

Instructor

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Course Description and Objectives

The purpose of this course is to introduce you to managing data in organizations. This course is designed to be a fundamentals survey course and will be the grounding to other information systems courses such as Systems Analysis and Design.

Through lectures, hands-on, and interactive activities, this course teaches database principles. You learn database development, access, and administration. The focus is on issues and principles of managing organizational data and current new trends such as business intelligence. You will get extensive experience in developing data models, creating relational databases, and working with Structured Query Language. You are also exposed to data management concepts, such as data warehousing and ERP.

Upon successfully completing INFO 358, you should be able to
1. Understand the organizational issues involved in data management;
2. Develop a valid data model for a business system of medium complexity;
3. Build and use a relational database;
4. Formulate complex relational database queries;
5. Be familiar with the principles of managing organizational data;
6. Be familiar with technology used to manage and exploit organizational intelligence;
7. Suggest different options for database architectures and implementation.

These objectives are met through a combination of class lectures, readings, case studies, outside speakers, a project, and hands-on computer exercises.

Mission of the Williams College of Business

"We educate students of business, enabling them to improve organizations and society, consistent with the Jesuit tradition".

Course Prerequisites

The following prerequisite are designed and required to ensure your success. Past results indicate that if you don't have them, you will **not** do well in this course. **YOU MUST DROP** this course if you don't have the prerequisites:

- INFO 200 Managing Info Technology

This prerequisite assumes that you are computer literate for an Information Systems major. This means you know computer history, computer technology, and some business applications. You are familiar and competent in using IBM PC-compatible computers, the Windows Operating System, Microsoft Office packages (Excel, Word, Access, PowerPoint, and others), and the World Wide Web. **These prerequisite topics, and others, will be assumed by the instructor, since you are registered in this course.** Since we will be working with the Microsoft Access database, having a basic working knowledge about this software is essential.

Course resources

Text Book:

1. Watson, Richard. Data Management: Databases and Organizations, Fifth Edition. Wiley, New York, 2006. (ISBN: 0-471-71536-0) - Required

2. Adamski, Joseph and Finnegan, Kathy. New Perspectives on Microsoft Office Access 2003, Comprehensive, Second Edition (ISBN 13: 978-0-619-26811-4 ISBN 10: 0-619-26811-5) - Reference

Teradata Student Network:
The class may use resources on the Teradata Student Network. Please register on TSN. It's URL is http://www.teradatastudentnetwork.com. The password to access materials is SmartDecisions (Please note that the password is not case sensitive).

Course Grading

Student performance will be evaluated on the following basis:

Exercises/Class Participation	10%
State of the Art Presentation Team Project	10%
Database Team Project	20%
Exams	60%
	100%

IMPORTANT NOTE: You **MUST** score at least 60% on combined score for the exams in order for the group work points to count toward your final grade. In other words, the group work cannot help you pass the course if you have a failing grade on the exams and exercises/participation.

Class Participation:
Students are expected to attend all class sessions on time. Class attendance should be given priority over other activities. If you plan to be absent for more than 3 class sessions please drop the course as your overall course grade will be reduced by a letter grade. All students are expected to be present in class on time. Late attendance will count as a partial absence. "A" students must attend all classes and actively provide thoughtful, relevant comments to class discussions.
<u>Please note</u>: *using computers or laptops for personal use (e.g., email) will be grounds for reduction of your overall participation grade. The participation grade will be reduced by one percentage point for <u>each instance</u> of computer use for any activity outside of class work. Your participation grade will be available to you at the end of the semester.*

Group Projects:

There will be **two (2)** group assignments.

- Each team must have 2 members. Each team will be required to define, elect or volunteer a team leader as the point of contact for the team.

- Most of you will work effectively in teams, each contributing your best effort and proving to be a reliable, productive team member. However, because past experience has proven that team projects always raise the possibility that some team members may not carry their fair share of the load, a confidential peer evaluation will be conducted at the end of the semester. This evaluation will impact your grade.

Exams and Assignment Deliverables:

There will be three exams. All students must take exams at the scheduled times except for emergencies. Deliverables of assignments are due at the start of class on the due date; your project grade will suffer significantly if a deliverable is not on time (i.e., 20% reduced for each day late). Your grade on the database team project will be based on the quality of the various deliverables your team produces.

General Course Philosophies & Policies

The learning environment:

Please turn off your cell phone, PDA, or another gadget that may produce sound while class is in session. Laptop use during class sessions for any personal work (e.g., email, messaging, etc…) is NOT permitted.

Academic honesty:

Academic dishonesty, in any form, is a serious offense. The University Rules and other documented policies of the department, college, and university related academic integrity will be enforced. Any violation of these regulations, including acts of plagiarism or cheating, will be dealt with on an individual basis according to the severity of the misconduct.

Special needs:

If you have any special needs related to your participation in this course that may influence your performance in this course you should meet with the instructor to arrange reasonable provisions to ensure an equitable opportunity to meet all the requirements of this course.

Evaluation:

The final grade awarded will be based on the percentage of the total possible points awarded as follows:

Scale			
A	95-100	C+	77-79
A-	90-94	C	73-76
B+	87-89	C-	70-72
B	83-86	D	60-69
B-	80-82	F	Below 60

Grading:

Every effort will be made to return papers, exams, etc…within one week of submission.

Grade appeals:
If you have a concern about a grade that you receive in this class, you are invited to submit to me a written appeal within one week of receiving the grade in question. The appeal should outline your specific concerns with the grade and provide evidence supporting why the grade should be changed. I will then review your appeal and respond as quickly as possible. I reserve the right to re-grade the entire exam, assignment in question.

Communication:
Email is the best way to communicate with me. I will answer emails within 24 hours of receipt. I expect the same courtesy from you. Email will be a very important mode of communication in this class as we meet only twice a week. Also make sure to check blackboard on a regular basis for updates or additional course material. Whenever possible, I will announce changes to blackboard course via email.