

CIS 8040 Database Management Systems

Spring 2010 Syllabus

Note

This syllabus provides a general guideline for the conduct of this course. However, deviations may be necessary.

Course Description

Developing and managing efficient and effective databases requires understanding the fundamentals of database systems, techniques for designing databases, and principles of database administration. This course provides an introduction to relational database management systems with emphasis on database development, use, and management. Practical database design and applications development of database systems using modern software tools will be emphasized.

Features:

1. A database design project that covers the complete process of database design from conceptual modeling, logical modeling, and physical implementation.
2. Hands-on experience with SQL Server 2008, including: database engine and analysis services.
3. A research project to let students do some in-depth study on a particular database topic.

Course Objectives

1. Understand basic concepts and principles of relational database systems.
2. Understand the concepts, skills and methods for designing relational databases using a relational DBMS such as Microsoft SQL Server.
3. Understand the major aspects of database administration.
4. Understand the basics of database applications.

Instructor Information

Jack G. Zheng, Visiting Assistant Professor, Computer Information Systems

Contact

Office: RCB (College of Business Building) 924
Email: gzheng@cis.gsu.edu * (see Policies later)
Phone: 404-413-7370

Office Hour

Tuesdays 1:00PM – 3:30PM
Thursdays 1:00PM – 5:00PM
Fridays By appointment

Course Materials

Major textbook

Database Processing (11th edition), by Daivd Kroenke and David Auer, Prentice Hall, 2010, ISBN: 978-01323-02678.

Other Readings

Other recommended complementary books and resources on specific subjects (optional)

- Comprehensive
 - Fundamentals of Database Systems, by Ramez Elmasri and Shamkant B. Navathe
- Database design

- Database Modeling and Design: Logical Design, 4th Edition, by Toby J. Teorey, Sam S. Lightstone, and Tom Nadeau, 2005, ISBN 0126853525
- SQL: <http://sqlcourse.com> and <http://sqlcourse2.com>
- SQL Server 2008:
 - Beginning Microsoft SQL Server 2008 Administration, by Chris Leiter, Dan Wood, et al., Wrox, 2009
 - <http://technet.microsoft.com/en-us/library/ms130214.aspx>
 - <https://webdb.gsu.edu/etraining/>

Website

1. Main site <http://jackzheng.net/teaching/cis8040> (schedule, lectures, public materials, etc.)
2. MyRobinson <http://myrobinson.gsu.edu> (course management: assignment submission, grades, announcement, protected files, discussion board, etc.)

Software

1. Microsoft SQL Server 2008 for exercises and assignments: downloadable from MSDNAA
2. MS Visio 2007
3. Other software may be needed: software that can open PDF files and zip files

Grading

Weighting	Grade			
<i>Item</i>	<i>Percent</i>	<i>Points</i>	<i>Percent</i>	<i>Grade</i>
Exam (1)	20%	450-500	=>90%	A
Quiz (2)	10%	400-449	=>80%	B
Individual Assignment (6)	30%	350-399	=>70%	C
Topic Research Project	10%	300-349	=>60%	D
Database Design Project	25%			
Group Evaluation	5%			
Total:	100%			

More details about each assignment or project will be provided in separate documents.

Course Schedule

For the most updated schedule, visit the website: <http://jackzheng.net/teaching/cis8040> Lecture slides and other materials will be posted in each corresponding week.

Policies

Communication

Please understand that the instructor is teaching 4 classes with more than 150 students. The best communication is face to face communication in the classroom and my office. Important announcements will be made to the class electronically through the MyRobinson “Announcements” as well as in classroom. It is important that you check your MyRobinson account regularly for announcements, new assignments, and grade postings.

Email guideline

Email is another great way of communication if you write the email subject like this:
[Your Last Name] [Course Number] - [Title]

Example: McDonald CIS8040 – assignment 2 question

Emails without proper subject line are likely to be categorized as junk emails and will NOT be replied.

Attendance

Class attendance is expected and anticipated. Notify the instructor if you cannot come to the class.

Bonus points

There will be a maximum of 2% points for participation in the course discussion board in MyRobinson. Your participation will be evaluated base on:

- Number of quality posts
- Originality of your posts