CISM 3340: Data Resource Management & Design
Syllabus Fall Semester 2013

INSTRUCTOR: Joan Deng
Office RCOB 2226
Phone 678-839-5532 (better to email me as voice mail is not reliable)
Class Schedule MW 03:30 pm - 04:50 pm
Office Hours MW 11:00 a.m. - 03:00 p.m., 05:00 p.m. – 06:00 p.m.
E-mail Address jdeng@westga.edu
Course Site: http://webct.westga.edu/

COURSE DESCRIPTION:
The student will learn basic concepts pertaining to database management systems (DBMS) including
database design, database development and database management. The student will learn to use modern
DBMS (e.g., MS SQL Server 2012, Oracle Database 11g, MySQL) on a microcomputer to solve
managerial problems.

COURSE LEARNING OBJECTIVES:
1. Understand and use widely used terms pertaining to database management systems in written exams
   and in class discussions. (BBA 3, MIS 1)
2. Briefly describe current trends in database management systems. (BBA 3, MIS 1)
3. Design and implement on a microcomputer normalized data structures to solve business problems.
   (BBA 3, BBA 6, MIS 1)
4. Utilize Relational Database objects to solve business problems. (BBA 3, BBA 6, MIS 1)
5. Design and implement SQL computer code to solve business problems. (BBA 3, BBA 6, MIS 1)

To view the RCOB Learning Goals/Objectives go to http://www.westga.edu/~mgmtbus/learningobj.htm

COURSE MATERIALS:

9780132742924, Publisher: Prentice Hall

Additional readings will be posted on CourseDen.

Software: You must have access to the following software.
- MS Access 2010
- MS SQL Server 2012
- Oracle Database 11g Release 2
- MS Visio 2010
- XAMPP
• MS Visual Studio 2012
• Dreamweaver

All the required software is loaded on the RCOB computer lab workstations.

Additional Materials: Removable storage media (blank CDs and USB flash drive) and medium-sized binder clips

PREREQUISITES:
CISM 3330 and a working knowledge of Windows and IBM-compatible computers. Any deviations from this must have written approval of the Department Chairman. A student who has not successfully completed the prerequisites nor has the approval of the Chairman may be removed from the course anytime during the semester.

CREDIT HOUR POLICY (3 CREDIT HOURS):
For approximately fifteen weeks, students in this class will generally spend 150 minutes with direct faculty instruction (either online or face-to-face) and work about 360 minutes outside of the classroom each week. This out-of-class work may include, but is not limited to, readings, assignments, projects, group work, research, and test preparation.

METHOD OF INSTRUCTION:
Course materials will give you multiple ways to learn the material presented in this course. The textbook and assigned readings will provide one source of information. Lectures will be based on, and extend, the material in the textbooks. Assignments are designed to reinforce conceptual understanding. In addition to individual assignments, you must work in a team to complete a hands-on database project. Each team should be composed of three or four students. An important component of this course is to experience the process of prototyping a database system through which you will gain experience of the development process of database systems. The hands-on database project will help you learn better and master the concepts step by step.

ASSIGNMENTS: All assignments are individual, not group, assignments. They will be placed in the CourseDen assignments folder and made available on the first day of class. Assignment due dates are in the course Schedule. All assignments are due at the beginning of class on the day they are due. Do not miss class to finish an assignment – it is late after class starts. If you will be unable to attend class on the due day, you may turn in the assignment ahead of time or ask someone to submit it for you. Late assignments will be accepted up to only one day later. There is a 20% penalty assessed against late assignments that are unexcused. Exercises not turned in by 03:30 PM the day after the due date will be marked MISSED and will not receive any credit. All exercises must be reviewed within one week of their return during class or when grades are posted, whichever is later.

NOTE: Good practices to adopt when using Lab computers is "Save and Save Often" and "Save to more than one place / media".

GROUP PROJECT: The group project will consist of designing and developing a database-system application. The project will require you to analyze user requirements, develop and document a database design to support the user requirements, implement the database in SQL Server 2012 or MySQL or Oracle 11g, and finally implement the web-based database application for users to access the database. Details of the project will be posted on CourseDen and discussed in class. Please form your project
group (3 - 4 students), and submit your project application choice, each group member’s complete name and campus e-mail address to me by September 11, 2013.

FINAL EXAM: The final exam is closed book, closed notes, and will consist of multiple-choice questions that cover the material covered in the textbook, lectures, assignments, and group projects. During the exam you may refer to one (1) 8½" x 11" sheet on which you have written exam notes on both sides of the paper. Please note that the exam aid sheet must be handwritten.

QUIZZES: During the semester, unannounced in-class quizzes will be given. Since quizzes may be given at the beginning or end of class, make sure to arrive early and remain for the entire class period so that you do not miss a quiz.

GRADING

<table>
<thead>
<tr>
<th>Database Project (Individual Student Grade)*</th>
<th>65</th>
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<tbody>
<tr>
<td>Assignment #1</td>
<td>10</td>
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<tr>
<td>Assignment #2</td>
<td>20</td>
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<tr>
<td>Assignment #3</td>
<td>30</td>
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<tr>
<td>Assignment #4</td>
<td>15</td>
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<tr>
<td>Quizzes</td>
<td>20</td>
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<td>Final Exam</td>
<td>40</td>
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<td><strong>Total</strong></td>
<td><strong>200</strong></td>
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A: 180 and above
B: 160 – 179.999
C: 140 – 159.999
D: 120 – 139.999
F: 119.999 and below

* Database Project Grading
  Group Grade (max of 65 points)
  5 Deliverable #1 (Proposal)
  10 Deliverable #2 (Conceptual Design)
  10 Deliverable #3 (Logical Design)
  30 Deliverable #4 (Final Report)
  10 Presentation

Individual Student Grade (max of 65 points)
(Peer Evaluation Grade /10) * Group Grade

Bonus points (max of 10) will be rewarded based on students’ participation in class discussions.
COURSE SCHEDULE: The amount of material covered in any given day will vary depending on the depth of in-class discussion that is generated by the material. We will move along at a lively rate. I expect you to study sufficiently outside of class to keep up with the material. I have divided the material into class sessions, but the material we cover may not correspond exactly to a session if the class discussion takes longer than anticipated. Try to stay ahead in the readings about one session. Bring questions to class.

ATTENDANCE: The instructor may occasionally take attendance to verify the roster. You are expected to attend all classes. If you miss a class, you are responsible for the material covered during class. If you miss an exam, quiz or a due date for an assignment, you must have a university-excused absence to be eligible to take a make-up test, make-up quiz, or turn in late material without a penalty. The format of the make-up test or quiz may be different from the original exam or quiz. The instructor is under no obligation to provide an opportunity for you to make up work missed because of an unexcused absence. If an absence is excused and the instructor is properly notified of the absence in a timely manner, prior to or immediately after the absence, she will provide you with an opportunity to make up a test, make up a quiz, turn in an assignment after the due date, or provide a satisfactory alternative to be completed within two days from the last date of absence.

Students must attend class on the project presentation days (not just the days your group is presenting)! Attendance will be monitored during presentations. If you miss any group presentation sessions, you will lose all your project presentation points.

UWG COURSEDEN: The instructor uses UWG CourseDen (formerly WebCT) to post course syllabus, lecture notes, assignments, group projects, and database files for you to download.

CAMPUS EMAIL: Campus E-Mail is an official means of communication at University of West Georgia. All students must have, and read on a daily basis, their campus (MyUWG) email accounts. If you would like to ask questions and seek clarification regarding exams, quizzes, homework assignments, and grades via email, please use your campus email account. Since E-mail is not a particularly "rich" form of communication, please try to be as clear as possible about your inquiries or messages via email. A few thoughts to ensure successful email:

To facilitate sorting of incoming email, make sure that your message has "CISM3340" or "CISM 3340" and some other pertinent phrase in the ‘Subject’ line.

Because the ‘From’ line of your message typically contains your email alias, make sure that you completely identify yourself in the body or closing of your email message.

If you expect a reply, ensure that

1. your email message can be replied to by using the email address listed in the ‘From’ line.
2. appropriate text appears in the ‘Subject’ line

ACADEMIC HONESTY POLICY: At the University of West Georgia we believe that academic and personal integrity are based upon honesty, trust, fairness, respect and responsibility. Students at West Georgia assume responsibility for upholding the honor code. West Georgia students
pledge to refrain from engaging in acts that do not maintain academic and personal integrity. These include, but are not limited to, plagiarism, cheating, fabrication, aid of academic dishonesty, lying, bribery or threats, and stealing. You are responsible for the safeguarding of your computer account. Your account and network connection are for your individual use. A computer account is to be used only by the person to whom it has been issued. You are responsible for all actions originating through your account or network connection. You must not impersonate others or misrepresent or conceal your identity in electronic messages and actions.

AMERICANS WITH DISABILITIES ACT: If you are a student who is disabled as defined under the Americans with Disabilities Act and require assistance or support services, The Office of Disability Services will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations. If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please notify your instructor using the course email system within five business days after the beginning of the course and attach a PDF copy of your Student Accommodations Report (SAR) which is available only from the Office of Disability Services. Accommodation requests require appropriate notice and paperwork.

STUDENT RIGHTS AND RESPONSIBILITIES: Please carefully review the information at the following link:
http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf. The document at this link contains important information pertaining to your rights and responsibilities in this class. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.

CLASSROOM RULES:
- Get to class on time. If you do arrive late, try not to disrupt the rest of the class. If you have to leave class early, try to sit somewhere where you can leave without disrupting the class.
- No food, drink, or tobacco products are allowed in the classroom.
- Do not talk in class unless you are prepared to share the discussion with the class; it will be assumed you are discussing what we are covering.
- Pagers, cellular telephones, PDAs and other electronic communication devices must be turned off or muted during class. Do not carry on a cellular telephone or text message conversation during class.
- Do not read the newspaper or textbooks for other classes during our class.
- All graded material is due at the beginning of class on the due date. If you have a university-approved excuse, you must notify me as soon as possible, but no later than the end of the next working day after your return from the absence so we can make arrangements for you to turn in your work.
# COURSE SCHEDULE

(The instructor reserves the right to change the schedule and/or requirements)

<table>
<thead>
<tr>
<th>Class Session</th>
<th>Topic/Lecture</th>
<th>Class Activities</th>
<th>Miscellaneous</th>
</tr>
</thead>
</table>
| 1. 08/26/2013 | Course Introduction & Syllabus  
Introduction to Database  
Reading: Chapter 1 | CourseDen                  |                                    |
| 2. 08/28/2013 | Introduction to Database (continued)  
Reading: Chapter 1 | Work on Access Database  
Discuss Assignment #1 |                                    |
| 3. 09/02/2013 | Labor Day                                                                     | No Class Scheduled        |                                    |
| 4. 09/04/2013 | Review Access 2010                                                           | Overview of Group Project |                                    |
| 5. 09/09/2013 | Relational Models  
Reading: Chapter 2 |                                    |                                    |
| 6. 09/11/2013 | Relational Models (continued)  
Reading: Chapter 2 | Finalizing student groups and project choices | Project Group Lists Due |
| 7. 09/16/2013 | Relational Models (continued)  
Reading: Chapter 2 | Introducing MS SQL Server, MySQL and Oracle Database | Assignment #1 Due |
| 8. 09/18/2013 | Relational Models (continued)  
Reading: Chapter 2 |                                    | Database project proposal (Deliverable #1) due |
| 9. 09/23/2013 | Data Modeling and the ER Model (Conceptual Design)  
Reading: Chapter 4  
Supplement Reading: MS Visio 2010 Tutorial (on CourseDen) |                                    | We skip Chapter 3 now in order to focus on data storage aspect of the database design; Chapter 3 SQL will be covered later when we learn data retrieval aspect of the database use. |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignment/Due Date</th>
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</thead>
<tbody>
<tr>
<td>10/25/2013</td>
<td>Data Modeling and the ER Model (continued)</td>
<td>Reading: Chapter 4</td>
<td>MS Visio 2010 Demo</td>
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<tr>
<td>11/30/2013</td>
<td>Data Modeling and the ER Model (continued)</td>
<td>Reading: Chapter 4</td>
<td>Discuss Assignment #2</td>
</tr>
<tr>
<td>12/02/2013</td>
<td>Database Logical Design (ER—Relations Mapping)</td>
<td>Reading: Chapter 5</td>
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<tr>
<td>10/07/2013</td>
<td>Database Logical Design (continued)</td>
<td>Reading: Chapter 5</td>
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<tr>
<td>10/09/2013</td>
<td>Database project Presentation #1</td>
<td>Database project presentations #1: conceptual models</td>
<td>Database project conceptual design (Deliverable #2) due</td>
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<tr>
<td>10/14/2013</td>
<td>Database project Presentation #1 (continued)</td>
<td>Database project presentations #1: conceptual models</td>
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<tr>
<td>10/16/2013</td>
<td>SQL DDL (continued)</td>
<td>Creating databases with SQL Server, MySQL, and Oracle Database</td>
<td>Assignment #2 Due</td>
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<tr>
<td>10/21/2013</td>
<td>SQL DDL (continued)</td>
<td>Discuss Assignment #3</td>
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<tr>
<td>10/23/2013</td>
<td>SQL DDL (continued)</td>
<td>Database project presentations #2: logical models</td>
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<tr>
<td>10/28/2013</td>
<td>Database project Presentation #2</td>
<td>Database project presentations #2: logical models</td>
<td>Database project logical design (Deliverable #3) due</td>
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<tr>
<td>Date</td>
<td>Event</td>
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<tr>
<td>20. 10/30/2013</td>
<td>Database project Presentation #2 (continued)</td>
<td>Database project presentations #2: logical models</td>
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<tr>
<td>21. 11/04/2013</td>
<td>SQL Query Reading: Chapter 3</td>
<td>Query in SQL Server, MySQL, and Oracle Database</td>
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<td>22. 11/06/2013</td>
<td>SQL Query (Continued) Reading: Chapter 3</td>
<td>Assignment #3 Due</td>
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<td>23. 11/11/2013</td>
<td>SQL Query (Continued) Reading: Chapter 3</td>
<td>Discuss Assignment #4</td>
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<td>24. 11/13/2013</td>
<td>SQL Query (Continued) Reading: Chapter 3</td>
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<tr>
<td>25. 11/18/2013</td>
<td>Web-based Database Application</td>
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<td>26. 11/20/2013</td>
<td>XML, Data Warehouse &amp; BI systems Reading: Chapters 7 &amp; 8</td>
<td>Assignment #4 Due</td>
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<tr>
<td>27. 11/25/2013</td>
<td>Thanksgiving Recess</td>
<td>No Class Scheduled</td>
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<tr>
<td>28. 11/27/2013</td>
<td>Thanksgiving Recess</td>
<td>No Class Scheduled</td>
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<tr>
<td>29. 12/02/2013</td>
<td>Database Project Presentation #3</td>
<td>Database project presentations #3: database implementations and applications</td>
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<tr>
<td>30. 12/04/2013</td>
<td>Database Project Presentation #3 (continued)</td>
<td>Database project presentations #3: database implementations and applications</td>
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<tr>
<td>31. 12/11/2013</td>
<td>Final Exam (2:00 PM — 4:00 PM)</td>
<td>Take final exam</td>
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