

CISM 3340: Data Resource Management & Design
Section 01D
Syllabus Fall Semester 2017

INSTRUCTOR: Joan Deng

Office	MILLER HALL 2226
Phone	678-839-5532 (better to email me as voice mail is not reliable)
Class Schedule	MW 12:30 PM - 01:45 PM
Office Hours	W 9:00 AM – 12:30 PM, 2:00 PM – 3:30 PM
E-mail Address	jdeng@westga.edu
Course Site:	https://westga.view.usg.edu/

ONLINE SUPPORT:

- CourseDen Home page: <https://westga.view.usg.edu>
- CourseDen Help & Troubleshooting: <http://uwgonline.westga.edu>
- Distance Learning Library Services: <http://westga.edu/~library/depts/offcampus/>
- Ingram Library Services: <http://westga.edu/~library/info/library.shtml>
- UWG Bookstore: <http://www.bookstore.westga.edu>
- Disability Services: http://www.westga.edu/studentDev/index_8884.php

Additional resources and links are available in the UWG/Online CourseDen (D2L) Resources widget on your course homepage

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 2014, Oracle Database 11g Release 2) on a microcomputer to solve managerial problems. Students will understand the concepts of big data and work with a NoSQL database such as MongoDB.

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:

Text: Database Concepts, 7/E, David Kroenke and David Auer, ISBN-10: 0133544621, ISBN-13: 9780133544626, Publisher: Prentice Hall

Additional readings will be posted on CourseDen.

Software: You must have access to the following software.

- MS Access 2013 (MS Office 365)
- MS SQL Server 2014 (Microsoft Imagine Webstore)
- Oracle Database Express Edition 11g Release 2
(<http://www.oracle.com/technetwork/database/database-technologies/express-edition/downloads/index.html>)
- Oracle SQL Developer (<http://www.oracle.com/technetwork/developer-tools/sql-developer/downloads/index.html>)
- MongoDB (<https://www.mongodb.org/downloads>)
- E/R Assistant
(http://higherred.mheducation.com/sites/0072942207/student_view0/e_r_assistant.html)
- MS Visual Studio 2012 (Microsoft Imagine Webstore)

All the required software is loaded on the MILLER HALL computer lab workstations.

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. Online lectures will be based on, and extend, the material in the textbooks. In-class group exercises and 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.

COMMUNICATIONS WITH THE PROFESSOR:

- Students **WILL** receive individual e-mails concerning course updates and changes.
- Students should check their UWG email accounts on a daily basis.
- You are responsible to find out about any changes in due dates and course content.
- As UWG e-mail is the official means of communication, only UWG issued e-mail addresses will be answered by the Professor. CourseDen mail is not utilized by the Professor (neither read nor answered).
- Please be sure you have adequate space available in your UWG e-mail in box account, as only one attempt will be made to contact a valid UWG address.
- I prefer to use the CourseDen discussion board for questions so the entire class can benefit from the answer. Before posting a question, make sure that you read through the questions and answers that have been posted on the discussion board. Often, you will find the answer to your question there. The discussion board is essential to this course. Please be sure to check it every day. Everyone can read the discussion forum postings; therefore, do not post private information.
- Please contact me directly through my UWG email (jdeng@westga.edu) for anything that is confidential or private. All e-mails to the Professor are to be sent to jdeng@westga.edu. If you would like to ask questions via email, please make sure you use CISM3340 as the subject line, so that I recognize that it is from one of you, and so that my spam filter do not accidentally delete your message. Emails will be answered within hours if not immediately. Although attempts will be made to reply as quickly as possible, you should not assume that all the emails sent after 10:00 PM or over the weekend will be replied on the same day. **I REPLY TO ALL EMAILS. IF YOU DO NOT GET A REPLY WITHIN A 24-HOUR PERIOD, ASSUME I DID NOT RECEIVE IT AND PLEASE RESEND.**

ASSIGNMENTS:

All assignments are individual, not group, assignments. They are made available on the first day of class. All assignments must be submitted through the **Assignment Submission Folders on CourseDen**. No additions or corrections will be accepted once assignments have been submitted for grading. Assignment due dates are in the course Schedule. All assignments are due at **12:30 PM** on the days they are due. Late assignments will be accepted up to only **one day** later. There is a **20% penalty** assessed against late assignments that are unexcused. Assignments not turned in by 12:30 PM the day after the due date will be marked **MISSED** and will not receive any credit. All assignments 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 2014 or Oracle Database Express Edition 11g

Release 2, 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 **via email by August 28, 2017**. The group size is set to be 3-4, with a goal of building a functionally complete application by allocating appropriate manpower. Please note the same amount of work is still expected if your group is smaller than 3 people. If your group is larger than 4, you need to justify why you need a large group-- in terms of manpower requirements to build a larger project, with a proportionally larger amount of work. Please send your request and justification to your instructor via email.

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:

Database Project (Individual Student Grade) ¹	65
Assignment #1	15
Assignment #2	20
Assignment #3	35
Assignment #4	15
Assignment #5	20
In-Class Group Work Participation (Individual Student Grade) ²	20
Quizzes	30
Total	220

- A: 198 and above**
- B: 176 – 197.999**
- C: 154 – 175.999**
- D: 132 – 153.999**
- F: 131.999 and below**

¹ **Database Project Grading**

Database Project 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

Database Project Individual Student Grade (max of 65 points)

(Database Project Peer Evaluation Grade /10) * Database Project Group Grade

²In-Class Group Work Participation Grading

In-Class Exercises Group Grade (max of 20 points)

20 The group completed all the required in-class exercises & presentations

10 The group had one absence

0 The group had two or more absences

In-Class Group Work Participation Individual Student Grade (max of 20 points)

(In-Class Group Work Peer Evaluation Grade /10) * In-Class Exercises Group Grade

ATTENDANCE VERIFICATION:

In order to distribute Title IV funding (federal student aid), student attendance verification is required. Therefore all students must verify their attendance by being physically present in the class during our in-class days.

ENGAGEMENT & PROGRESS:

Engagement and progress with the course material is critical. Students enrolled in this course are expected to be active learners and participants. Students are expected to show progress in learning the material. Progress is shown through the completion of assignments, database project and quizzes. If you miss a quiz or a deadline for an assignment, you must have a university-excused absence to be eligible to take a make-up quiz, or turn in late material without a penalty. *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 quiz, turn in an assignment after the deadline, or provide a satisfactory alternative to be completed within two days from the last date of absence.

UWG COURSEDEN:

The instructor uses UWG CourseDen to post course syllabus, online lectures, lecture notes, assignments, group projects, and database files for you to download.

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:
https://www.westga.edu/administration/vpaa/assets/docs/faculty-resources/common_language_for_course_syllabi_v2.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.

PROPRIETARY MATERIAL AGREEMENT:

The materials on this course website are only for the use of students enrolled in this course for purposes associated with this course and may not be retained or further disseminated.

ONLINE PRIVACY:

This course may require you to work with other sites and entities beyond UWG and CourseDen (D2L) where some personal information (e.g. your name, affiliation with UWG, or current employment) may be displayed. You have the right to regulate the displaying of information pertaining to yourself on the Internet. If you are uncomfortable displaying information that you deem overly personal, you may take steps to post more anonymous manner (such as posting online your first name and last initial only or other pseudonym). You also agree to respect other people's wishes to remain anonymous.

LINKS TO AND FROM THIRD-PARTY SITES:

There may be links established between this course and other entities and sites on the World Wide Web, Internet or other areas that are not under the control of, nor maintained by your professor or the

University of West Georgia (UWG). These links do not necessarily constitute an endorsement by your professor or UWG, and UWG has no obligation to monitor such sites, and the user agrees that neither your professor nor UWG is responsible for the content of such sites or for any technical or other problems associated with any such third-party site, links, or usage.

HB 280 (CAMPUS CARRY):

UWG follows University System of Georgia (USG) guidance:

http://www.usg.edu/hb280/additional_information#

You may also visit our website for help with USG Guidance:

<https://www.westga.edu/police/campus-carry.php>

FINAL NOTES:

I reserve the right to modify any part of this document. Appropriate prior notice will be given to students in the event of modification.

COURSE SCHEDULE

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

Date	Class Days	Class Activities	Assignments and Database Project Deliverables Due by 12:30PM
08/09/2017	In Class Day - Course Introduction	Course Syllabus & CourseDen	
08/14/2017	Online Day - Chapter 1: Introduction to Database	Chapter 1 Video Lecture on CourseDen	
08/16/2017	Online Day - Review Access 2013	MS Access 2013 Video Lecture on CourseDen	
08/21/2017	Online Day - Chapter 2: Relational Models	Chapter 2 and Database Project Overview Video Lecture on CourseDen	
08/23/2017	Online Day - Chapter 2: Relational Models (continued)	Chapter 2 Normalization Video Lecture on CourseDen	
08/28/2017	Online Day - Chapter 2: Relational Models (continued)	Chapter 2 and Database Project Deliverable 1 Video Lecture on CourseDen	Project Group Lists Due <i>(Please email it to jdeng@westga.edu)</i>
08/30/2017	Online Day - Database Implementation in MS SQL Server and Oracle Database	MS SQL Server and Oracle Database Video Lecture on CourseDen	Assignment #1 Due <i>(Please submit it through the Assignment Submission Folder on CourseDen)</i>

09/04/2017	Labor Day – No Class		
09/06/2017	Online Day - Chapter 4: Data Modeling and the ER Model (Conceptual Design)	Chapter 4 Basic ER Model Video Lecture on CourseDen	
09/11/2017	Online Day - Chapter 4: Data Modeling and the ER Model (continued)	Chapter 4, ER Assistant and Database Project Deliverable 2 Video Lecture on CourseDen	
09/13/2017	In Class Day - Data Modeling and the ER Model	ERD In-Class Group Exercise	Database project proposal (Deliverable #1) due (Please submit it through the Assignment Submission Folder on CourseDen)
09/18/2017	In Class Day – Database Project Group Meeting	Database Project ERD Design	
09/20/2017	In Class Day – Database Project ERD Presentation	In-Class Presentation	
09/25/2017	Online Day - Chapter 5: Database Logical Design (ER—Relations Mapping)	Chapter 5 and Database Project Deliverable 3 Video Lecture on CourseDen	
09/27/2017	In Class Day - Database Logical Design	Logical Model In-Class Group Exercises	Assignment #2 Due (Please submit it through the Assignment Submission Folder on CourseDen)
10/02/2017	Online Day - Chapter 3: SQL DDL	Chapter 3 DDL Video Lecture on CourseDen	

10/04/2017	Online Day - Chapter 3: SQL DDL (continued)	SQL DDL, DML, & MS SQL Server Video Lecture on CourseDen	Database project conceptual design (Deliverable #2) due (Please submit it through the Assignment Submission Folder on CourseDen)
10/09/2017	Online Day - Chapter 3: SQL DDL (continued)	Oracle Database, SQL DML, & Assignment 3 Video Lecture on CourseDen	
10/11/2017	Online Day - Chapter 3: SQL Query	SQL Query Video Lecture (I) on CourseDen	
10/16/2017	Online Day - Chapter 3: SQL Query (Continued)	SQL Query Video Lecture (II) on CourseDen	
10/18/2017	Online Day - Chapter 3: SQL Query (Continued)	SQL Query (III) and Assignment 4 Video Lecture on CourseDen	
10/23/2017	In Class Day: SQL Query	SQL Query In-Class Group Exercises	Assignment #3 Due (Please submit it through the Assignment Submission Folder on CourseDen)
10/25/2017	Online Day - Web-based Database Application Supplement Reading: "Web-based Database Application (ASP .NET)" on CourseDen	Web-Based Database Application and Database Project Deliverable 4 Video Lecture on CourseDen	
10/30/2017	Online Day - Chapters 7 & 8: XML, Data Warehouse & BI systems	XML and Data Warehouse Video Lecture on CourseDen	

11/01/2017	Online Day – Chapter 8: Data Warehouse & BI systems (Continued)	SQL Server Data Warehouse Cube Video Lecture on CourseDen	Database project logical design (Deliverable #3) due (<i>Please submit it through the Assignment Submission Folder on CourseDen</i>)
11/06/2017	Online Day - Big Data and NoSQL/MongoDB Supplement Reading: “MongoDB Manual” on CourseDen	Big Data & MongoDB Video Lecture on CourseDen	
11/08/2017	Online Day - Big Data and NoSQL/MongoDB (Continued)	MongoDB and Assignment 5 Video Lecture on CourseDen	Assignment #4 Due (<i>Please submit it through the Assignment Submission Folder on CourseDen</i>)
11/13/2017	Optional In Class Day – Database Project Group Meeting	Database Project Deliverable 4	
11/15/2017	Optional In Class Day – Database Project Group Meeting	Database Project Deliverable 4	Assignment #5 Due (<i>Please submit it through the Assignment Submission Folder on CourseDen</i>)
11/20/2017	Thanksgiving – No Class		
11/22/2017	Thanksgiving – No Class		

11/27/2017	In class Day - Database Project Presentation	In-Class Presentation	<ul style="list-style-type: none"> • Database project final report (Deliverable #4) due (Please submit it through the Assignment Submission Folder on CourseDen) • In-class group work peer evaluation form due (Please email it to jdeng@westga.edu or submit the hard copy in class)
11/29/2017	In class Day - Database Project Presentation (Continued)	In-Class Presentation	<ul style="list-style-type: none"> • Database project peer evaluation form due (Please email it to jdeng@westga.edu or submit the hard copy in class)