LIS 668 (201) Information Systems Design

Dates of Semester: January 14 – May 1, 2014
Course to be Conducted Online

COURSE INFORMATION:

This is an asynchronous online course. All the course materials and activities are facilitated in the Blackboard course management system.

INSTRUCTOR INFORMATION:

Name: Namjoo Choi, Ph.D.
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Office hours: Wednesday, 1:00 p.m. – 5:00 p.m. and by appointment (via both face to face and virtually, Adobe Connect or Skype)
Preferred Contact Method: Email
Response time: If you email me, you should expect a response within 24 hours. There may be a delay over weekends or holidays.

COURSE IT REQUIREMENTS

You will need access to an appropriate computer with a broadband Internet connection. Please, make sure that you have a reliable computer for use during the course. Also, note that this course requires you to **install Microsoft Access 2013** in your computer (2010 version is fine, but our text is based on 2013). Please visit http://download.uky.edu/ and log in with your UK id and password; above the search box, you will see OnTheHub tab. Click the tab, then Students. You will see Microsoft Office 2013 (freely available to students).

BLACKBOARD

We will use the Blackboard course management system to facilitate the class. Please visit http://www.uky.edu/Blackboard/ to learn about this system and the login requirements. You should be automatically added to the Blackboard roll; if this goes as expected, you will not have to sign up manually for the course. Blackboard help is available online through the Blackboard wiki website (http://wiki.uky.edu/Blackboard/Wiki%20Pages/Home.aspx), and from the UK helpdesk (859.257.1300; http://www.uky.edu/IT/CustomerService/). The helpdesk is also able to assist with all general computing issues (file download, browser updates, etc.).

EMAIL

It is vital that we can depend on effective email communication. Unfortunately, many personal email accounts can run into problems with the UK mail spam filtering system. For instance, some services like Yahoo and Hotmail have been blocked at various times from receiving UK mail. Therefore, I ask that you always follow up if you have not had a response from me within a reasonable period (I usually will respond within 24 hours).

DISTANCE LEARNING LIBRARY SERVICES

At UK, students in online courses have available Distance Learning Library Services. The link to DLLS is: (http://www.uky.edu/Libraries/DLLS).

COURSE DESCRIPTION

This course is designed as a first database course for MLIS students without any previous experience. The general aim of the course is to understand the basic concepts, principles, and hand-on experiences on database systems. The course will evolve from understanding, visualizing, and analyzing data. Then transition to understanding relational databases by designing and building databases using Access and querying using Structured Query Langue (SQL).

STUDENT LEARNING OUTCOMES

After successful completion of this course, you will be able to:

- Demonstrate a clear understanding of the basic concepts and principles of database systems
- Conduct data modeling using Entity-Relationship (ER) diagrams
- Translate ER diagrams to relational data models
- Design a database application using a relational DBMS
- Understand Structured Query Language (SQL) and use SQL to retrieve data from databases

COURSE MATERIALS

Required textbook:

Database Concepts: 7th Edition, by David Kroenke, David Auer, Publisher: Pearson, ISBN-13: 9780133544626. Electronic copy at a lower price: http://www.coursesmart.com/database-concepts-seventh-edition/david-m-kroenke-david-j-auer/dp/9780133544862

Additional readings: there will be additional readings to the textbook, and they will be made available on the course Blackboard site.

ASSESSMENT & ASSIGNMENTS

Assignments & Grading (total grade = 300 points)

- **Access Assignments**	120 points (40%)
- **Database Concept Assignments**	60 points (20%)
- **Test 1**	30 points (10%)
- **Test 2**	30 points (10%)
- **Individual Final Project**	60 points (20%)

Final grading scale:

90% and above	(270 – 300) =	A
80% to 89%	(240 – 269) =	B
70% to 79%	(210 – 239) =	C
Below 70%	(0 – 209) =	E

Access Assignments

Assignments must be submitted as electronic documents (single file for each assignment; save it as a zip file if assignment is in multiple files) via Bb by the due dates. There will be 12 assignments. They accounts for 40% (12 x 10 points = total 120 points) of your grade. Late submissions are subject to a penalty of 3 points off per day.

Database Concept Assignments

These assignments are to develop an understanding for the database concepts covered in each week. Review questions (RQ) or exercises (PS) from the textbook will be utilized (5 points x 12 weeks = 60 points). Grading will be based on the following rubric: 5 – correct answer with full explanation, 4 – correct answer with less explanation, 3 - correct answer with explanation, but with minor errors, 2 – incorrect answer with wrong explanation, 1 - incorrect answer with no explanation, 0 – no submission. Late submissions are subject to a penalty of 1.5 points off per day.

Tests:

Each test will include 20 multiple choice questions. These tests are given through Bb. Details will be supplied with each test, but they test the content covered preceding each test. Review sheets for each test will be also made available a week before the test.

Individual Final Project:

This project due near the end of the semester will consist of using Access to build a real world database system. The detailed description will be provided after Test 1. Late submissions are subject to a penalty of 6 points off per day.

ETHICS & POLICIES

Please review and reflect on the academic integrity policy adopted by SLIS at http://www.uky.edu/CIS/SLIS/academics/policies.pdf. By turning in materials for review in this course, you certify that all work presented is your own and has been done by you independently. You can also find policies on "excused absences", "incompletes", and "academic accommodations due to disability" in this linked document. Papers or assignments prepared for other classes cannot be used to fulfill the requirements of this class.

INTEGRATION OF THE SYLLABUS WITH THE THEMES OF DIVERSITY, ASSESSMENT, AND TECHNOLOGY

All UK professional education programs address and affirm the value of diversity in education, the use of technology to support all aspects of instructional programming, and the importance of attaining high levels of skill in assessing the outcomes of instruction. This course provides students an opportunity to demonstrate attention to these themes and reflect on the mechanisms that this course has provided to demonstrate improved skills in these areas.

MILITARY MEMBERS AND VETERANS

We recognize the complexities of being a member of the military community and also a student. If you are a member of the military or a military veteran or dependent, please inform your instructor if you are in need of special accommodations. Drill schedules, calls to active duty, mandatory training exercises, complications with GI Bill disbursement, and other unforeseen military and veteran related developments can complicate

your academic life. If you are aware of a complication, we will work with you and put you in contact with university staff members who are trained to assist you. Please contact the Coordinator of the University of Kentucky Veterans Resource Center at (859) 257-1148 for additional assistance. Visit http://www.uky.edu/veterans for more available resources.

COURSE SCHEDULE AND READINGS

There follows an outline of course content for each week, with course assignments.

Week	Begins	Read	Pages in Textbook
1	Jan. 14	Review syllabus and familiarize yourself with organization of the course in Bb	
		Database Concept Assignment 1 (due by 11:59 p.m., Monday, Jan. 19)	
Jan. 19 - Monday - Martin Luther King Birthday - Academic Holiday			
		Chapter 1: Getting Started	
2	Jan. 20	Kroenke & Taylor, Chapter 1	1-13
		Access Assignment 1 (due by 11:59 p.m., Sunday, Jan. 25): pp. 25 – 41 (stop before *'Adding Data to the CUSTOMER Table in Datasheet View'*)	
		Database Concept Assignment 2 (due by 11:59 p.m., Sunday, Jan. 25)	
3	Jan. 26	Kroenke & Taylor, Chapter 1	14-24
		Access Assignment 2 (due by 11:59 p.m., Sunday, Feb. 1): pp. 42 – 53	
		Database Concept Assignment 3 (due by 11:59 p.m., Sunday, Feb. 1)	
		Chapter 2: The Relational Model	
4	Feb. 2	Kroenke & Taylor, Chapter 2	62-76
		Access Assignment 3 (due by 11:59 p.m., Sunday, Feb. 8): pp. 57 – 59 (stop before *'San Juan Sailboat Charters Case Questions'*)	
		Database Concept Assignment 4 (due by 11:59 p.m., Sunday, Feb. 8)	
5	Feb. 9	Kroenke & Taylor, Chapter 2	77-89
		Access Assignment 4 (due by 11:59 p.m., Sunday, Feb. 15): pp. 89 – 105	
		Database Concept Assignment 5 (due by 11:59 p.m., Sunday, Feb. 15)	
		Chapter 3: Structured Query Language	
6	Feb. 16	SQL Intro to Aliases at http://www.w3schools.com/sql/default.asp	
		Kroenke & Taylor, Chapter 3	119-143

Access Assignment 5 (due by 11:59 p.m., Sunday, Feb. 22): pp. 110 – 113 (stop before '*Regional Labs Case Questions*')

Database Concept Assignment 6 (due by 11:59 p.m., Sunday, Feb. 22)

7 Feb. 23 Test 1 Week

Review sheets for test 1 will be provided, and a discussion board titled 'test 1 questions' will be open for questions

Test 1 must be taken between 9:00 a.m., Friday, Feb. 27 and 11:59 p.m., Sunday, Mar. 1.

8 Mar. 2 SQL Joins to DB Data Types at http://www.w3schools.com/sql/default.asp

Kroenke & Taylor, Chapter 3 144-175

Access Assignment 6 (due by 11:59 p.m., Sunday, Mar. 8): pp. 182 – 194 (stop before '*Creating Tables with Microsoft Access SQL*')

Database Concept Assignment 7 (due by 11:59 p.m., Sunday, Mar. 8)

9 Mar. 9 SQL Functions at http://www.w3schools.com/sql/default.asp

Kroenke & Taylor, Chapter 3 176-182

Access Assignment 7 (due by 11:59 p.m., Sunday, Mar. 22): pp. 195 – 210

Database Concept Assignment 8 (due by 11:59 p.m., Sunday, Mar. 22)

Final project will be released

Mar. 16-21 - Monday through Saturday - Spring Vacation - Academic Holidays

Chapter 4: Data Modeling and the Entity-Relationship Model

10 Mar. 23 Kroenke & Taylor, Chapter 4 245-261

Access Assignment 8 (due by 11:59 p.m., Sunday, Mar. 29): pp. 218 – 219 (only AW.3.1. A to L)

Database Concept Assignment 9 (due by 11:59 p.m., Sunday, Mar. 29)

11 Mar. 30 Kroenke & Taylor, Chapter 4 262-270

Access Assignment 9 (due by 11:59 p.m., Sunday, Apr. 5): pp. 270 – 278

Database Concept Assignment 10 (due by 11:59 p.m., Sunday, Apr. 5)

Final project first deliverables are due at 11:59 p.m., Sunday, Apr. 5

12 Apr. 6 Kroenke & Taylor, Chapter 5 287-296

Access Assignment 10 (due by 11:59 p.m., Sunday, Apr. 12): pp. 282

Database Concept Assignment 11 (due by 11:59 p.m., Sunday, Apr. 12)

13	Apr. 13	Kroenke & Taylor, Chapter 5	297-317

Access Assignment 11 (due by 11:59 p.m., Sunday, Apr. 19): pp. 318 – 324

Database Concept Assignment 12 (due by 11:59 p.m., Sunday, Apr. 19)

14	Apr. 20	Final Project

If you need any help with the final project, please feel free to contact me or send me your project for my review before your final submission (by Thursday, Apr. 23).

Final project is due at 11:59 p.m., Sunday, Apr. 26

Access Assignment 12 (due by 11:59 p.m., Sunday, Apr. 26): pp. 327 – 328

15	Apr. 27	Test 2

Review sheets for test 2 will be provided, and a discussion board titled 'test 2 questions' will be open for questions

Test 2 must be taken between 9:00 a.m., Friday, May 1 and 11:59 p.m., Sunday, May 3.