LIS 668 (201) Information Systems Design

Dates of Semester: January 13 – April 29, 2015
Course to be Conducted Online

COURSE INFORMATION:

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

INSTRUCTOR INFORMATION:

Name: Namjoo Choi, Ph.D.
Office location: 339 Little Library Building
Phone Number: (859) 257-4113
Email address: namjoo.choi@uky.edu,
Office hours: Wednesday, 1:00 p.m. – 5:00 p.m. and by appointment
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).

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 Canvas 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 Canvas 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 Canvas. 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

Excused Absences and Verification: Please refer to Student Rights and Responsibilities, Part II, Section 5.2.4.2 (http://www.uky.edu/StudentAffairs/Code/part2.html) for UK's policy on excused absences. You can request verification for excused absences.

Excused absences include (as defined at the web site above):

- Significant illness of student or serious illness of household member or immediate family
- Death of a household member or immediate family
- Trips for members of student organizations, class excursions or participation in intercollegiate athletic events
- Major religious holidays
- Any other circumstance that the instructor finds reasonable cause for nonattendance

Academic Accommodations: If you have a documented disability that requires academic accommodations, please see me as soon as possible. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, jkarnes@uky.edu) for coordination of campus disability services available to students with disabilities. We can then collaborate on the best solution.

Academic Integrity, Cheating and Plagiarism: You are expected to submit your own original work for all assignments in this course. See the home page for the Office of Academic Ombud Services (http://www.uky.edu/Ombud) for a definition of plagiarism, how to avoid plagiarism and UK's new academic offense policy. Please refer to Student Rights and Responsibilities, Part II, Section 6.3 (http://www.uky.edu/StudentAffairs/Code/part2.html) for UK's policy on academic integrity.

Classroom Behavior, Decorum and Civility: Please be respectful to others in the class and engage in civil discourse when we discuss topics that have a diversity of perspectives. Please help me maintain the most courteous environment by using a little peer pressure if necessary.

TECHNOLOGY INFORMATION & RESOURCES

Students must have a computer with a reliable Internet connection and audio capabilities. Internet Explorer 7 (IE) or Firefox 2.x are the recommended browsers for those using a Windows-based PC. Those using Firefox 3.x may encounter problems with assignment uploads. Those using an Apple computer with MAC OS X (10.5.x) may use Firefox 3.x or Safari 3.x. Please be certain that your computer and/or browser allow you to view Adobe Reader documents (.pdf). Microsoft Office and other software products are free for students: https://iweb.uky.edu/MSDownload/. As your instructor, I am your first go-to person for technology problems. If you need more immediate assistance, please contact TASC or UKIT.

Teaching and Learning Services Center (TASC)
http://www.uky.edu/TASC/; 859-257-8272
Information Technology Customer Service Center (UKIT)
http://www.uky.edu/UKIT/; 859-257-1300
Library Services
Distance Learning Services

http://www.uky.edu/Libraries/DLLS
DL Interlibrary Loan Service:
http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16

General Course Policies: Policies concerning academic integrity, excused absences and academic accommodations due to disability are available online at: http://ci.uky.edu/sis/sites/default/files/policies.pdf

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. 13	Review syllabus and familiarize yourself with organization of the course in Canvas	
		Database Concept Assignment 1 (due by 11:59 p.m., Monday, Jan. 18)	
Jan. 18 - Monday - Martin Luther King Birthday - Academic Holiday			
		Chapter 1: Getting Started	
2	Jan. 19	Kroenke & Taylor, Chapter 1	1-13
		Access Assignment 1 (due by 11:59 p.m., Sunday, Jan. 24): 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. 24)	
3	Jan. 25	Kroenke & Taylor, Chapter 1	14-24
		Access Assignment 2 (due by 11:59 p.m., Sunday, Jan. 31): pp. 42 – 53	

Database Concept Assignment 3 (due by 11:59 p.m., Sunday, Jan. 31)

Chapter 2: The Relational Model

4 Feb. 1 Kroenke & Taylor, Chapter 2 62-76

Access Assignment 3 (due by 11:59 p.m., Sunday, Feb. 7): pp. 57 – 59 (stop before *'San Juan Sailboat Charters Case Questions'*)

Database Concept Assignment 4 (due by 11:59 p.m., Sunday, Feb. 7)

5 Feb. 8 Kroenke & Taylor, Chapter 2 77-89

Access Assignment 4 (due by 11:59 p.m., Sunday, Feb. 14): pp. 89 – 105

Database Concept Assignment 5 (due by 11:59 p.m., Sunday, Feb. 14)

Chapter 3: Structured Query Language

6 Feb. 15 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. 21): pp. 110 – 113 (stop before *'Regional Labs Case Questions'*)

Database Concept Assignment 6 (due by 11:59 p.m., Sunday, Feb. 21)

7 Feb. 22 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. 26 and 11:59 p.m., Sunday, Feb. 28

8 Feb. 29 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. 6): pp. 182 – 194 (stop before *'Creating Tables with Microsoft Access SQL'*)

Database Concept Assignment 7 (due by 11:59 p.m., Sunday, Mar. 6)

9 Mar. 7 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. 20): pp. 195 – 210

Database Concept Assignment 8 (due by 11:59 p.m., Sunday, Mar. 20)

Final project will be released

Mar. 14-19 - Monday through Saturday - Spring Vacation - Academic Holidays

Chapter 4: Data Modeling and the Entity-Relationship Model

10	Mar. 21	Kroenke & Taylor, Chapter 4	245-261

Access Assignment 8 (due by 11:59 p.m., Sunday, Mar. 27): pp. 218 – 219 (only AW.3.1. A to L)

Database Concept Assignment 9 (due by 11:59 p.m., Sunday, Mar. 27)

11	Mar. 28	Kroenke & Taylor, Chapter 4	262-270

Access Assignment 9 (due by 11:59 p.m., Sunday, Apr. 3): pp. 270 – 278

Database Concept Assignment 10 (due by 11:59 p.m., Sunday, Apr. 3)

Final project first deliverables are due at 11:59 p.m., Sunday, Apr. 3

12	Apr. 4	Kroenke & Taylor, Chapter 5	287-296

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

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

13	Apr. 11	Kroenke & Taylor, Chapter 5	297-317

Access Assignment 11 (due by 11:59 p.m., Sunday, Apr. 17): pp. 318 – 324

Database Concept Assignment 12 (due by 11:59 p.m., Sunday, Apr. 17)

14 Apr. 18 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. 21).

Final project is due at 11:59 p.m., Sunday, Apr. 24

Access Assignment 12 (due by 11:59 p.m., Sunday, Apr. 24): pp. 327 – 328

15 Apr. 25 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, Apr. 29 and 11:59 p.m., Sunday, May 1