VALDOSTA STATE UNIVERSITY MASTER OF LIBRARY& INFORMATION SCIENCE MLIS 7520 Database Design for Information Professionals Syllabus—Fall Semester 2011 Three Credit Hours

Instructor: Changwoo Yang, PhD. Assistant Professor-MLIS Program Odum Library - 1500 N. Patterson Street Valdosta, GA 31698-0150 Phone: (229) 333-7185 Fax: (229) 259- 5055 E-mail cyang@valdosta.edu

Course Description:

Addresses government and industry needs for design, implementation, and management of the database systems. Focuses on the application of data modeling technologies in library and information science practice and research.

Learning Outcomes:

Students will:

- Explain the fundamental principles of database systems.
- Develop database conceptual design using the Entity Relationship Model approach.
- Demonstrate skills and perspective to analyze real-world requirements, produce a data model, and implement the database.
- Use Structured Query Language (SQL).
- Develop and optimize complex SQL queries to perform tasks such as table creation, data input, and retrieval.
- Evaluate trends in database technologies and the application of database technologies to various activities.

Class Activities:

Class activities include a set of readings, assignments, online discussions, and a term project. Students will complete weekly assignments that provide an opportunity to demonstrate familiarity with the course content. Assignments will provide students with conceptual and practical understanding of database design principles and SQL syntax. The purpose of the term project is to allow students to demonstrate their understanding of data modeling and database design issues covered in the class by designing and implementing a database that can handle real-world data and information management issues. Term project report should include problem statement, background information about the problem, ER diagrams, data dictionary, rationale for the design, challenges faced during design and implementation processes, and brief evaluation of the project.

Details for each week are posted in the appropriate folder on the course website. It is the student's responsibility to check the course calendar for DUE DATES for all class work and the weekly folders and assignment folders for all required and supplemental readings and other materials.

Textbooks and Required Readings

Rob, P., & Coronel, C. (2007). *Database Systems: Design, Implementation, and Management* (7th ed.). Thomson Course Technology. ISBN 1-4188-3593-5

Note: Since the class focuses on basic concepts in database design, you don't necessarily have to have the latest edition on the textbook (Rob & Coronel).

Forta, B. (2005). *MySQL*® *Crash Course*. Boston: Safari Books Online Available online through Odum Library (VSU Blazenet account required)

Davis, M. E., & Phillips, J. A. (2006).*Learning PHP and MySQL*. Sebastopol: O'Reilly. Available online through Odum Library (VSU Blazenet account required)

Note: Since the class focuses on basic concepts in database design, you don't necessarily have to have the latest edition of the textbook (Rob & Coronel).

There are also required, supplemental readings to cover broad areas of database design, management, privacy, and current issues. These readings are made available to the student through the web as PDF files. It is expected that each student will have the ability to download and open up both PDF files and MS Word files.

Software:

Microsoft Visio (version 2000 or later) for creating Entity Relationship Diagrams (ERDs) or other applications such as Microsoft Power Point. Free trial version for MS Visio 2010 is available.

Grading:

Grades will be calculated as follows:

- 10 Weekly assignments: 10 * 5pts = 50pts
- 2 Exams: 2 * 15pts = 30pts

I Group assignment: 20pts = 20pts

Final grades will be assigned as follows:

- 90 100 Α
- В 80 - 89
- C D 70 - 79 .
- D 60 - 69
- F 0 - 59

Assignment Submission:

- Deadlines for each graded activity are clearly stated on the MLIS 7520 Course Calendar posted on the course home page on BlazeView.
- There is a one (1) day grace period for each graded activity after its original due date.
- Missing a deadline for any graded activity may result in a reduction in grade (i.e., 10% deduction from the original mark for each day after 1-day grace period) unless a mutually acceptable alternative is arranged with the instructor.
- All assignments must be submitted via assignment drop box on BlazeView.

Course Requirements:

Weekly Assignments (50 pts)

- Students will complete ten individual assignments that provide an opportunity to demonstrate familiarity with the course content.
- Collaboration on homework assignments is encouraged. You may consult outside reference materials, other students, or the instructor. However, all of your answers should reflect your understanding of the subject matter at the time of writing.
- Assignments will provide students with conceptual understanding of variety of library technologies and standards.

Exams (20pts)

There will be two exams: a midterm and a second exam. Exams will be composed of a combination of multiple choice, true/false, and short answer questions.

Group Assignment (30pts)

The purpose of the term project is to allow students to demonstrate their understanding of data modeling and database design issues covered in the class by designing and implementing a database that can handle real-world data and information management issues.

- Students are free to choose the topics of personal interest.
- Instructor approval required to start a class project.
- The instructor will also provide a list of possible projects for your selection.

Technological Requirements

As this is an online course that also focuses its attention on online information services, students must have almost daily access to the Internet. That access will use email and the web (through the student's browser) for class-related communication. It is expected that each student will be capable of dealing with PDF files and MS Words documents.

To meet all class requirements, you should also be prepared to: (1) check the BlazeVIEW course homepage several times a week, sometimes daily, if a course discussion is in progress; (2) keep electronic backup copies of each assignment and project you submit.

Communication

Faculty Office discussion board: The faculty office discussion board will be available for the duration of the semester. Please post course-related questions that may be relevant to your classmates on the discussion board. Please read the faculty office discussion board regularly.

If you have a personal question please send it to me via BlazeView course e-mail. Instructor checks his e-mail.

By institutional policy, instructors are asked to communicate with students online through VSU accounts (BlazeView and VSU Email). Opening and finding the BlazeView account is, therefore, required. For instructions on using a student BlazeView account, go to IT Helpdesk at http://www.valdosta.edu/helpdesk/.

Distance Learning Support:

To help address concerns of off-campus and online students, the library maintains the Library Services and Resources for Distance Education Student webpage at http://www.valdosta.edu/library/services/distancestudents.shtml . If at any time you have general questions about the library or specific questions about library resources, please call the Odum Library Reference Desk at (229) 333-7149 or email at http://www.valdosta.edu/library/forms/disted.php . Chat reference is available at http://www.valdosta.edu/library/ask.shtml .

UNIVERSITY POLICIES

Academic Honesty

Valdosta State University expects that graduate students will pursue their academic endeavors and conduct themselves in a professional and ethical manner. All work that a student presents to satisfy course requirements should represent his or her own efforts, including appropriate use and acknowledgment of external sources. Specific regulations related to student conduct and behaviors are contained in the *Student Handbook, Student Code of Ethics*. See http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml . It is your responsibility to make sure you understand how to avoid breeches of academic integrity. If you are unsure about the parameters of an assignment, ask for clarification. If you need help with citations and research resources and techniques, the university provides extensive resources for students. For help please start at the Odum Library's "how to" page: http://www.valdosta.edu/library/learn/howto.shtml

Using SafeAssign

By taking this course, you agree that all required course work may be subject to submission for textual similarity review to SafeAssign, a tool within BlazeVIEW. For more information on the use of SafeAssign at VSU see SafeAssign for Students (http://www.valdosta.edu/academic/SafeAssignforStudents.shtml).

Equal Opportunity Statement

Valdosta State University is an equal opportunity educational institution. It is not the intent of the institution to discriminate against any applicant for admission or any student or employee of the institution based on the sex, race, religion, color, national origin, disability, or sexual orientation of the individual. It is the intent of the institution to comply with the Civil Rights Act of 1964 and subsequent Executive Orders as well as Title IX, Equal Pay Act of 1963, Vietnam Era Veterans Readjustment Act of 1974, Age Discrimination of employment Act of 1967, and the Rehabilitation Act of 1973.

Accommodations Statement

Valdosta State University complies fully with the requirements of the Americans with Disabilities Act (ADA). The Access Office for Students with Disabilities (Access Office) serves students who have documented disabilities, have met the Valdosta State University (VSU) admission criteria, and are otherwise qualified. Students requesting accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in the Farber Hall. The phone numbers are 229-245-2498 (V/VP) and 229-219-1348 (TTY). The website is http://www.valdosta.edu/access/

Student Agreement

Enrollment in this class signifies that the student has agreed to abide by and adhere to the policies and regulations specified above. It is understood that the instructor may adapt or change this syllabus and the assignments contained within it according to circumstances that may arise during the course of the semester.