

VALDOSTA STATE UNIVERSITY
MASTER OF LIBRARY & INFORMATION SCIENCE
MLIS 7520 Database Design for Information Professionals
Syllabus -- Fall Semester 2008
Three Credit Hours

Instructor:

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Course Description:

Prerequisite or corequisite: MLIS 7000 or consent of the instructor. 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.

Course Objectives:

Upon completion the student will be able to:

- 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 and quizzes, 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. Selftest quizzes will help students measure their understanding of the course content. Students should participate in online meetings to discuss and share their opinions of the week's topics, assignments, and readings. 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 in design and implementation, and brief evaluation of the project.

Textbooks and Required Software:

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

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)

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 Word (doc) files.

Software**MySQL 5, PHP 5, PhpMyAdmin**

You may use XAMPP 1.6.7 which is an easy to install Apache distribution containing MySQL, PHP and Perl. XAMPP is free and available at <http://www.apachefriends.org/en/xampp-windows.html>

Microsoft Visio (version 2000 or later) for creating Entity Relationship Diagrams (ERD) or other applications to create ER diagrams such as Microsoft Power Point and Dia (an open source software) available at <http://www.gnome.org/projects/dia/>

VSU provides its students with a personal web space on the main server that can be used for some of class assignments (PHP and MySQL). Information about VSU personal web space is available at <http://www.valdosta.edu/helpdesk/guides/internet/> . Instructions on how to use this space are available at <http://www.valdosta.edu/it/web/vwwwaut/index.shtml>

In addition you will be assigned a MySQL account on the main VSU server after semester began. The instructor will have your accounts created. Students will manage their MySQL databases through PhPMYAdmin interface provided by VSU. Further instructions will be provided on the class WebCT site.

Grading:

A set of readings, assignments and quizzes, online discussions, and a term project will be assigned.

Grades will be calculated as follows:

- Participation and Discussions: 5 pts
- Assignments: 70 pts
- Term Project: 25 pts
- Quizzes: 3 pts (extra credit)

Participation (5 pts)

- The course is designed for online delivery.
- Students should participate in online meetings (synchronous and asynchronous) to discuss and share their opinions of the week's topics, assignments, and readings.
- Date and time information for online meetings will be made available on WebCT.
- All questions regarding content, assignments, quizzes, and readings should be posted to class message board.
- Students are expected to answer such questions posted by their classmates and it will count towards their grade.
- Students should post their views about each article at the designated area on the discussion board.

Assignments (70 pts) & Quizzes (3 pts)

- Students will complete weekly assignments that provide an opportunity to demonstrate familiarity with the course content.
- Assignments must be submitted as attachments (doc, pdf, or rtf) thru assignment dropbox.
- Collaboration on homework assignments is encouraged. You may consult outside reference materials, other students, or the instructor. However, all of your solutions should reflect your understanding of the subject matter at the time of writing.
- Assignments will provide students with conceptual and practical understanding of database design principles and SQL syntax.

Term Project (25 pts)

- 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.
- Students may be required to submit progress reports (problem statement and background information) about the term project.
- Term project report must be submitted along with the designed database.
- Term project report should include problem statement, background information about the problem, ER diagrams, data dictionary, rationale for the design, challenges faced in design and implementation, and brief evaluation of the project.

Final grades will be assigned as follows:

- A 90 - 100
- B 80 - 89
- C 70 - 79
- D 60 - 69
- F 0 - 59

Technical Requirements

All class materials will be placed on a password-protected Web site using the WebCT Vista course management program. If you are a new Vista user, go to the WebCT Vista help pages at <http://www.valdosta.edu/vista/>. On the right margin are “Self Help” links. View the “Getting Started” tutorial first. Then return to the Vista page and login using your BlazeNet email ID and password.

To meet all class requirements, you should also be prepared to: (1) check the WebCT Vista course homepage several times a week, sometimes daily, if a course discussion is in progress; (2) locate additional course readings using the GALILEO databases and download or print these out (this requires the Adobe Acrobat Reader on your computer); and (3) keep electronic backup copies of each assignment and project you submit.

All assignments must be submitted using a program compatible with VSU supported products. MS Word 97/2003 (.doc), Rich Text Format, and ASCII Text (.txt) are preferred file formats for assignments. Use MS Power Point (.ppt) format for Live Classroom presentations. At this time MS 2007 formats (.docx , .pptx) are not compatible with WebCT and Live Classroom.

Online meetings will be held in Live Classroom, a web-conferencing tool available in WebCT. Broadband connection is preferred (min. 56K dial-up connection is required) and all students must have a headset (w/ microphone) to participate in discussions and make presentations. See [MLIS Technology Requirements](#) page for more information.

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. As mentioned above, it is expected that each student will be capable of dealing with pdf files and Word documents (doc files).

Course communications will use . . .

1. WebCT Vista email system and discussion board are official means of communication in this class. In addition, VSU email system may be used alternatively in case WebCT Vista fails.
2. A WebCT Vista website, used by the instructor to make links available for each unit of the topical units

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 library@valdosta.edu . Chat reference is available at <http://www.valdosta.edu/library/ask.shtml> .

VSU Policies:

Please become aware of and be guided by these VSU policies.

- Access Office for Students with Disabilities: <http://www.valdosta.edu/access/>
- Academic Dishonesty, p. 269 of Graduate Catalog, 2008/09: <http://www.valdosta.edu/catalog/0809/grad/documents/grad266-296.pdf>
- Student Code of Conduct, p. 56: <http://www.valdosta.edu/studentaffairs/StudentHandbook.shtml>
- Equal Opportunity Statement: <http://www.valdosta.edu/eopma/aboutus/eos.shtml>
- Sexual Harassment: <http://www.valdosta.edu/legal/shp.shtml>

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.