

Fall 2011    **Comp368**    Information and Knowledge Management  
Syllabus

**Instructor:**            Dr. Shushuang Man  
**Office:**                SM268    Phone: 537-6168    Email: mans@smsu.edu  
**Office Hours:**        M.W. 10:30am-2:30pm, T. H: 1:30pm -2:30pm  
**Meeting Hours:**      T.TH: 10:30-11:45, SS224  
**Resource:**            D2L  
**Text:**                  Database Concepts, 5/E , Kroenke & Auer, Prentice Hall; 2010  
                                ISBN-10: 0138018804    ISBN-13: 978-0138018801  
**Prerequisite:**        Comp166

**Objectives:** To gain an understanding of the information modeling and representation (using UML), the essential concepts, principles, techniques, and mechanisms for the design, analysis, use, and implementation of computerized database systems. To gain experience in implementing and accessing relational databases using Microsoft Access and MySQL.

**Grading:** There will be assignments, projects, quizzes, a midterm and a final exam. You will use Access and MySQL to do group projects. The weights are given as follows:

<b>Assignments &amp;Projects:</b>	<b>30%</b>	<b>Quizzes:</b>	<b>20%</b>
<b>Midterm exam:</b>	<b>20%</b>	<b>Final Exam:</b>	<b>25%</b>
<b>Attendance:</b>	<b>5%</b>		

**Policies:** You are expected to attend all of the classes for this course. If you have to miss a class for any reason, you are responsible for all material covered in the lecture including assignments in your absence. Quizzes will be announced a week earlier. There is no make up for quizzes. If you must miss an exam for a reasonable excuse, you will need to contact the instructor before the exam in order to schedule a make-up. Assignments are to be submitted before class starts on the assigned due date. Late assignments will NOT be accepted. You should be familiar with the SMSU's academic dishonesty policy. Evidence to the contrary may result in failure in the course and/or other penalties.

**Final Exam:**    Dec. 14, Wednesday, 8:00am - 9:50am, SS224

## Tentative Schedule

Month	Date	Day	Topics/Activity	Room
<b>Aug.</b>	23	T	Ch1 Getting Started	SS224
Week1	25	R	Ch2 Relational Data Model	SS224
Week2	30	T	Appendix B MySQL	BA164
<b>Sept.</b>	1	R	Ch3 Structured Query Language(SQL)	BA164
Week3	6	T	SQL continued	BA164
	8	R	SQL continued	BA164
Week4	13	T	SQL continued	BA164
	15	R	Ch3A SQL Views	BA164
Week5	20	T	Ch4 Data Modeling, Entity-relationship model	SS224
	22	R	Entity-relationship diagram continued	SS224
Week6	27	T	Data Modeling with UML class diagram	SS224
	29	R	UML continued	SS224
<b>Oct.</b>	4	T	UML continued	SS224
Week7	6-7	R-F	Fall break no class	SS224
Week8	11	T	UML to relations	SS224
	13	R	Design databases by examples	SS224
Week9	18	T	Review	SS224
	20	R	<b>Midterm Exam</b>	
Week10	25	T	Ch5 Database design	BA164
	27	R	Ch6 Database administration	BA164
<b>Nov.</b>	1	T	Database administration continued	BA164
Week11	3	R	Ch7 Database processing applications	
Week12	8	T	Database processing applications continued	
	10	R	Ch8 Database processing for business Intelligence Systems	
Week13	15	T	Appendix A. Hands on Microsoft SQL Server 2008 R2	
	17	R	Appendix E. Hands Web Servers, PHP and the Eclipse PDT	
Week14	22	T	<b>Group Project</b>	
	23-25	W-F	Thanksgiving break no class	
Week15	29	T	<b>Group Project</b>	
<b>Dec.</b>	1	R	<b>Group Project</b>	
Week16	6	T	Review for final exam	
	8	R	<b>Group Project Presentation</b>	BA164
<b>Final Exam</b>	14	W.	<b>8:00-9:50PM Final Exam</b>	SS224

Outline

**Part I: Database Fundamentals**

Chapter 1. Introduction to Database Management System

Chapter 2. The Relational Model

Chapter 3. Structured Query Language

*Chapter 3A. SQL Views*

**Part II: Database Design**

Chapter 4. Data Modeling with Entity-Relationship Model

Data Modeling with UML class diagram

Chapter 5. Database Design

**Part III: Database Management**

Chapter 6. Database Administration

Chapter 7. Database Processing Applications

Chapter 8. Database Processing for Business Intelligence Systems

Appendix A: Getting Started with Microsoft® SQL Server 2008 Express

Appendix B: Getting Started with Sun Microsystems MySQL

Appendix E: Getting Started with Web Servers, PHP and the Eclipse PDT