

**Southern Illinois University at Carbondale  
Department of Management  
College of Business and Administration**

**MGMT 360b – Introduction to Database Management  
Spring 2003**

**T 3:35-4:50  
R 3:35-4:50**

**Lawson 121  
Rehn 17**

Instructor: Christine Alexander  
209 Rehn Hall  
453-7887

Office Hours: 9:30am – 12:30pm [T]  
9:00am – 12:00pm [W]  
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**Course Overview**

The course is intended to provide an introductory treatment of the principles and practices involved in the design and development of database applications. The course will cover the data modeling, relational database concepts, implementation of a database design using relational database management system (RDBMS) tools and structured query language.

The course assumes that students have a basic understanding of computer and information systems and are able to do the following before the start of the course:

- Familiar with file management activities under Windows environment.
- Use the World Wide Web to search for and disseminate information.
- Use Microsoft Word, Microsoft Excel and Microsoft Access.

**Course Objective**

The course will focus primarily on database design issues and their implementation using a database management system. Upon satisfactory completion of the course, a student should be able to:

- Understand the components of a database application
- Understand the development process of a database application
- Develop entity-relationship (ER) models, convert ER models into relations, and normalize the relations
- Implement a database design using an RDBMS
- Write queries using structured query language.

### Required Text

Pratt, Philip J. and Adamski, Joseph J., *Concepts of Database Management*, 4<sup>th</sup> Edition, Thomson/Course Technology, 2002.

### Attendance & Participation

Regular attendance and active participation in the classroom discussion are important. Unannounced quizzes, assignments, and related discussions will take place during class sessions.

### Policies & Academic Dishonesty

**All assignments should reflect individual effort.** Homework and assignments must be submitted in class on the dates indicated; examinations are to be taken on scheduled dates. There will be no make-up examination, quiz, or assignment, except for extreme emergency or medical reasons supported by medical or other appropriate documentation. All matters pertaining to academic dishonesty will be dealt as per guidelines set by the College of Business and Administration.

### Conduct of the Course

The attached class schedule lists the reading for the course, which should be completed **before** the class. Salient features of the reading material will be covered in the class.

### Evaluation Components

Examinations:	500 points
✓ Mid-term I	100 points
✓ Mid-term II	100 points
✓ Mid-term III	100 points
✓ Final	200 points
□ Quizzes	40 points
□ Project	300 points
✓ Database Design	100 points
✓ Table Creation/Data Loading	100 points
✓ Queries	100 points
□ Individual assignments	<u>160 points</u>
Total Points in Course	1000 points

Grades will be assigned as follows:

1000 - 900 = A    899 - 800 = B    799 - 700 = C    699 - 600 = D    Below 600 = F

### Examinations & Quizzes

Three midterm exams and a final exam will be administered in this course. The final exam **IS** comprehensive. THERE WILL BE NO MAKEUP EXAMS ADMINISTERED. IF ONE MIDTERM EXAM IS MISSED, ITS WEIGHT WILL BE CARRIED FORWARD TO

THE FINAL EXAM; IF THE SECOND OR THIRD MIDTERM EXAM IS MISSED, IT WILL RECEIVE A GRADE OF ZERO. IF THE STUDENT MISSES THE FINAL EXAM, THE STUDENT WILL RECEIVE A GRADE OF ZERO FOR THE EXAM.

Unannounced quizzes will be administered during the semester. When a quiz is administered, only material from the previous class period will be on the quiz.

**There are no makeup quizzes.**

### Assignments

Assignments will be announced in class. Assignments are due at the start of class on the specified dates. No late assignments will be accepted unless the delay is due to a substantiated emergency situation. The instructor will collect each assignment at the beginning of the class period. All assignments must be presented in a professional manner (i.e. collated and stapled when necessary, grammar/spelling, not hand written, etc.).

**All assignments should reflect individual effort.**

### Project

As an integral part of the course, students are required to work on a database design and implementation project. Students are free to choose among available Database Management Systems (DBMS) for their projects. The deliverables of the team project are:

Database design (due date to be announced)

Creation of tables and uploading data in the database (due date to be announced)

SQL for Queries (due date to be announced)

**Tentative Schedule (subject to change)**

<b>Date</b>	<b>Topic/Material</b>
14-Jan	Course overview, review of requirements, project
16-Jan	Chapter 1 - Introduction to Database Management
21-Jan	Chapter 1 - Introduction to Database Management
23-Jan	Chapter 1 - Introduction to Database Management
28-Jan	Chapter 2 - The Relational Model 1: Introduction, QBE, and Relational Algebra
30-Jan	Chapter 2 - The Relational Model 1: Introduction, QBE, and Relational Algebra
4-Feb	Chapter 2 - The Relational Model 1: Introduction, QBE, and Relational Algebra
6-Feb	Chapter 2 - The Relational Model 1: Introduction, QBE, and Relational Algebra
11-Feb	<b>Exam #1 - all material since the beginning of class;</b>
13-Feb	Chapter 6 - Database Design 2: Methodology
18-Feb	Chapter 6 - Database Design 2: Methodology
20-Feb	Chapter 6 - Database Design 2: Methodology
25-Feb	Chapter 6 - Database Design 2: Methodology
27-Feb	Chapter 5 - Database Design 1: Normalization
4-Mar	Chapter 5 - Database Design 1: Normalization
6-Mar	<b>Exam #2 - all material since Exam #1;</b>
11-Mar	<b>Spring Break</b>
13-Mar	<b>Spring Break</b>
18-Mar	Chapter 4 - The Relational Model 3: Advanced Topics
20-Mar	Chapter 4 - The Relational Model 3: Advanced Topics
25-Mar	Chapter 3 - The Relational Model 2: SQL
27-Mar	Chapter 3 - The Relational Model 2: SQL
1-Apr	Chapter 3 - The Relational Model 2: SQL
3-Apr	Chapter 3 - The Relational Model 2: SQL
8-Apr	Chapter 3 - The Relational Model 2: SQL
10-Apr	<b>Exam #3 - all material since Exam #2;</b>
15-Apr	Chapter 7 - DBMS Functions
17-Apr	Chapter 7 - DBMS Functions
22-Apr	Chapter 8 - Database Administration
24-Apr	Chapter 8 - Database Administration
29-Apr	Chapter 9 - Database Management Approaches
1-May	Chapter 9 - Database Management Approaches
9-May	<b>7:50-9:50am -- FINAL EXAM - COMPREHENSIVE</b>