

NOTE: **Written assignment due prior to first class session**



## **SYLLABUS**

**Course:** MGT 433 – Developing and Managing Databases, Group 170I – DC Center

**Instructor:** Jack L. Espinal

**Contact:** I am generally available at home in the evenings. Feel free to call me at home or at work. If I am not at my desk leave a message and I will call you back.

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### **COURSE LEARNING OBJECTIVES**

Students will be able to define and use terms and concepts used to describe and define relational databases. They will be able to relate these terms to the components of a Database Management System (DBMS).

1. Students will understand how the database has evolved in the business world and be able to describe the kinds of database systems that have been used.
2. Students will be able describe the activities needed for efficient database development and administration.
3. Given a set of business requirements / rules, students will be able to design a relational database using Microsoft Access.
4. Students will be able to discuss the available tools that can be used to assist in the development of relational databases and will be able to build database models.
5. Given a set of business requirements / business rules, students will be able to describe and use the processes needed to normalize a relational database down to and including third normal form.
6. Students will be able to convert a class diagram into normalized database tables.
7. Students should be able to use Microsoft Wizards to implement their database design in Microsoft Access.
8. Students should be able to use Microsoft Wizards to assist them in designing and using simple queries in their Microsoft Access database implementation.
9. Students will be able to design and use queries that perform internal computations
10. Students will be able to develop queries using multiple database tables.
11. Students will be able to design effective forms and reports.
12. Students will understand the place that macros have played in Microsoft Access Databases and be able to explain how they are related to Visual Basic and how Visual Basic has replaced the need for them.
13. Students will be able to handle error messages returned by the Microsoft Access Database.
14. Students will be able to explain and use the utilities, add-ins, and other tools supplied with Microsoft Access.
15. Explain security requirements and procedures for a given environment using a Microsoft Access Database.
16. Students will be able to explain client server and distributed databases and be able to discuss their advantages and disadvantages.

## COURSE TEXT BOOKS

Post, Gerald V. Database Management Systems – Third Edition. ISBN 0-07-247141-7

Sullivan, Michael. Microsoft Office Access 2003 Level 1. Element K Press ISBN 0-7580-6857-3

## READING AND ASSIGNMENTS

<u>Date:</u>	<u>Day</u>	<u>Session:</u>	<u>Assignments:</u>
25 October 2006	Wednesday	1	<b>Read Post Ch 1 Systems Design</b> DB Paper Outline Answer Rev Questions 1, 3 <b>Read Post Ch 9 Database Administration</b> Answer Exercises 3a, 3c, & 3d <b>Read Sullivan</b> Read & Work Lesson 1, pp 8-13
01 November 2006	Wednesday	2	<b>Read Post Ch 2 Database Design</b> Answer Rev Questions 2 - 4 <b>Read Sullivan</b> Read & Work Lesson 2, pp 18-33
08 November 2006	Wednesday	3	<b>Read Post Ch 3 Data Normalization</b> Answer Review Questions 1, 2, 4, & 11 <b>Read Sullivan</b> Read & Work Lesson 3, pp 38-43
15 November 2006	Wednesday	4	<b>Read Post Ch 4 Data Queries</b> Answer Review Question 1 <b>Read Sullivan</b> Read & Work Lesson 4, pp 50-67
29 November 2006	Wednesday	5	<b>Read Post Ch 6 Forms and Reports</b> Answer Rev Questions 1, 5, & 8 <b>Read Sullivan</b> Read & Work Lessons 5 & 6, pp 72-114
06 December 2006	Wednesday	6	<b>Read Post Ch 10 Distributed Databases &amp; the Internet</b> Answer Review Questions 1-3, & 5

## GRADED ASSIGNMENTS

Students should complete and turn in the graded homework assignments as follows:

Database paper outline prior to first class session	10 Points
Database Paper	10 Points
Homework: 5 pts per session due at the class start (No late submissions)	30 Points
Quizzes and/or In-class Exercises - 6, each worth 5 points (Count Best 5)	25 Points
Database Project	25 Points
<b>Total Possible Points</b>	<b>100 Points</b>

## **GRADING SCALE**

90 - 100 Points	“A”
80 – 89 Points	“B”
70 - 79 Points	“C”
60 - 69 Points	“D”
Below 60	“F”

## **ATTENDANCE**

Attendance at all class sessions is mandatory for all students. However, if you do miss a session we will negotiate a learning contract to make up the work for the session. A typical makeup assignment will be to build a MS Access database that integrates the concepts presented in the reading for the missed class to solve an instructor provided business case. You will still be responsible for homework and deliverables due that class session. However, please be aware that it will be difficult for you to complete your other assignments and your learning contract. Missing over two sessions requires the makeup of the entire course.

Please notify me ahead of time if you know that you will have to miss a session so that we can both plan accordingly.

## **ACADEMIC HONESTY**

It is expected that all material submitted as part of any class exercise an/or course requirement, in or out of class, is the actual work of the student whose name appears on the material or is properly documented otherwise. In addition, no assistance is to be obtained from commercial organizations that sell or lease research help or written papers.

## **NLU'S AMERICANS WITH DISABILITIES ACT (ADA) POLICY**

NLU seeks to ensure that its programs are accessible to all persons. Students in need of special assistance or an accommodation regarding any of the course requirements as outlined in this syllabus, the course objectives and/or course evaluation and assessment criteria, are advised to notify me within the first two weeks of class. We will meet privately to discuss a resolution of your issue, which may or may not include an appropriate referral (e.g., a Writing Specialist, the academic Accommodations Coordinator, the Director of Diversity, or the Office of Student affairs). Confidentiality will be maintained regarding your special needs.

## **Course Web Page**

The course web page has supplemental materials as well as many of the practical exercises that are used in class. It is located at <http://www.jespinal.com>. Browse the web page to see what is available.

## **Written Database Assignment**

Only an outline is due on the first class session. Do not write the entire paper until after our first meeting.

A new manager has just been assigned to your department. She told you that she has not had any experience with relational databases and has asked you to prepare a brief overview of database technology to help her understand how databases can be used to advantage in the organization. This written overview should include terms and concepts used to describe relational database management systems. In particular it should include an explanation of a relational database, relational table, table columns, table rows, entities, attributes, and rules that are used to ensure database integrity.

Since your manager is very busy she wants the answers to these questions to be brief, very clear, and no more than two pages.

Prepare an outline for your paper for use at the first class session.