



# LINCOLN UNIVERSITY

– BA 383 –

## Information Systems Database Management

COURSE SYLLABUS

Department of Business and Economics

Spring, 2009

**Lecture Schedule:** Wednesday 9:00 AM – 11:15 AM  
**Credit:** 3 units  
**Instructor:** Prof. Sergey Aityan  
**Office Hours:** Wednesday 1:00 PM – 3:00 PM  
Other days by appointment  
**e-mail:** [aityan@lincolnuca.edu](mailto:aityan@lincolnuca.edu)  
**☎:** (510) 628-8016  
**Text:** Modern Database Management, Ninth Edition, by Jeffrey A. Hoffer, Mary B. Prescott, and Heikki Topi. ISBN-10: 0-13-600391-5; ISBN-13: 978-0-13-600391-5.  
**Last Revision:** January 2, 2009

### CATALOG DESCRIPTION

Explanation and comparison of the techniques and methodologies of database management systems; management of them in business environment. Limitation and application of various DBMS; application of costs and benefits in selecting DBMS. (3 units) Prerequisite: BA 381 and CS 10

### LEARNING OBJECTIVES

To introduce students to database management systems and methods, database context management, the database environment, and the database development process. Students will learn methods of database analysis, data modeling in the organization, logical and physical database design and implementation, and the use of SQL. We will consider the client/server and the Internet database environments, data warehousing and datamining, data and database administration, distributed databases, object-oriented data modeling and object-oriented database development.

### INSTRUCTIONAL METHODS

Lecture method is used in combination with the practical use of the Internet and business software to solve application problems. The emphasis will be on learning by doing. Every

student must participate in an intensive classroom activity. Reading, writing, “business case study”, and project assignments will be made throughout the course

### **COURSE PROJECT**

Every student must complete a course project.

### **REQUIREMENTS**

All students are required to attend classes. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Reading, writing, home tasks, and “business case study” assignments will be made throughout the course. Students must complete all assignments and take all quizzes, mid-term exam and final exam on the **dates due**. Plagiarism will result in the grade “F” and a report to the administration. No computers or cellular phones will be allowed to use during tests

### **GRADING**

Activity	Time	Percent
Quizzes, home tasks, and classroom activities	Every week	20%
Project and special assignments	Every week	20%
Mid-term exam	Middle of the course	20%
Final exam	Last week of the course	40%

### **SCORING**

All results of written test will employ a numerical scoring system that is convertible as indicated below.

94-100	A	73-76	C
90-93	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	D-
77-79	C+	0-59	F

### **COURSE SCHEDULE**

<b>Week</b>	<b>Topic</b>	<b>Chapters</b>
1	The Database Environment	Ch. 1
2	The Database Development Process	Ch. 2
3	Modeling Data in the Organization	Ch. 3
4	The Enhanced E-R Model and Business Rules	Ch. 4
5	Logical Database Design and the Relational Model	Ch. 5
6	Physical Database Design and Performance	Ch. 6
7	Introduction to SQL	Ch. 7
8	(a) Review (b) Midterm Exam	Ch. 1 - 7
9	Advanced SQL	Ch. 8
10	The Client-Server Database Environment	Ch. 9
11	The Internet Database Environment	Ch. 10

12	Data Warehousing and Data Mining	Ch. 11
13	Data Quality and Data Integration	Ch. 12
14	Data and Database Administration	Ch. 13
15	Distributed and Object-Oriented Databases	Ch. 14
16	(a) Review	Ch. 1 – 14
	(b) Comprehensive Final Exam	

**MODIFICATION OF THE SYLLABUS.**

The instructor reserves the right to modify this syllabus at any time during the semester. An announcement of any changes will be made in a classroom.