



LINCOLN UNIVERSITY

– BA 383 –

Information Systems Database Management

COURSE SYLLABUS

Department of Business and Economics

Fall, 2009

- Lecture Schedule:** Monday, 12:30 PM – 3:15 PM
Credit: 3 units
Instructor: Prof. Sergey Aityan, DSc, PhD
Office Hours: Monday, 3:45 PM – 5:00 PM
Tuesday, 1:30 PM – 4:00 PM
Thursday, 3:45 PM – 5:00 PM
Students are advised to schedule appointments on the appointment list on the board at the professor's office that will ensure exact appointment time without waiting.
e-mail: aityan@lincolnuca.edu
☎: (510) 628-8016
- Textbook:**
- 1. Main Textbook:**
Jeffrey A. Hoffer, Mary B. Prescott, and Heikki Topi, "Modern Database Management," Ninth Edition, ISBN-10: 0-13-600391-5; ISBN-13: 978-0-13-600391-5.
 - 2. Course lecture notes:**
Sergey Aityan, "Information Systems Database Management," the online course notes on <http://elearning.lincolnuca.edu>.
- Last Revision:** August 10, 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: CS 10

COURSE 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 data mining, data and database administration, distributed databases, object-oriented data modeling and object-oriented database development.

THE COURSE STRUCTURE

The course is structured in the form of lectures, discussions, course project, home assignments, quizzes, midterm and final exams.

COURSE PROJECT

Every student must complete and submit the assigned project.

REQUIREMENTS

Every student must participate in an intensive classroom activity. 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.

ATTENDANCE

Students are expected to attend each class session. If you cannot attend a class due to a valid reason, please notify the instructor prior to the class.

EXAMS

Both, midterm and final exams are structured as written essay to answer to the given questions. The essay must be written structurally with clear logical presentation of the answers. Graphs, charts, tables, and other supporting illustrations are required if needed. Examples to illustrate the answers are required.

Exams will cover all assigned chapters, any additional readings or supplementary materials covered in class. The exams are neither “open book” nor “open notes.”

GRADING

Week	Topic	Chapters
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	(a) Logical Database Design and the Relational Model	Ch. 5
	(b) Physical Database Design and Performance	Ch. 6
6	Normalization	Ch. 7
7	Introduction to SQL	Ch. 8
	Advanced SQL	Ch. 9
8	(a) Review	Ch. 1 - 9
	(b) Midterm Exam	
9	The Client-Server Database Environment	Ch. 10
10	The Internet Database Environment	Ch. 11
11	Data Warehousing and Data Mining	Ch. 12
12	Data Quality and Data Integration	Ch. 13

13	(a) Data and Database Administration	Ch. 14
	(b) Distributed and Object-Oriented Databases	Ch. 15
14	Course Project Presentations and Defense	
15	(a) Review	Ch. 1 – 15
	(b) Comprehensive Final Exam	

OTHER COMMENTS

- Please participate. What you put into the class will determine what you get out of it – and what others get out of it.
- Please come on time. Late arrivals disturb everyone else.
- If you miss a class, you are responsible for getting notes/slide printouts on the material covered from a classmate or the instructor.
- To avoid distracting noise in class, cellular phones must be turned off or the ringing mode silenced.
- Questions and comments during the class are welcome. Do not hesitate to ask questions – do not leave anything unclear for you.

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.