**Course Title:** Special Topics in Business: **Instructor:** Prof. Serge Ruiz

**Information Systems Database** 

**Course No:** BA 298 II **Phone:** 949-232-3323

**Units:** 3 units (= 45 lecture hours) **E-mail:** sruiz@lincolnuca.edu

**Class Hours:** Thursdays, **Office Hours:** By appointment

12:30 pm - 3:15 pm

**Semester:** Spring 2015 **Office Number:** Room 402

# **REQUIRED MATERIALS**

**Textbook**: *Modern Database Management*, Jeffrey A. Hoffer, Mary B. Prescott, and Heikki Topi, 11<sup>th</sup> Edition, 2012. ISBN-13: 978-0132662253, ISBN-10: 0132662256

## **COURSE DESCRIPTION**

This course offers topics of specialized interest in the major fields of study. Case studies and independent research may be included. Topics vary each term; so students should not include this in a concentration unless they know it will be available.

In Spring Semester 2015, the course contents of BA 298 II are: explanation and comparison of the techniques and methodologies of database management systems in a business environment. Limitation and application of various DBMS; costs and benefits in selecting DBMS. (3 units) Prerequisite: BA 260.

#### **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 data mining, 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 business software and the Internet. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Reading, writing, and computer assignments will be made throughout the course.

# OTHER REQUIREMENTS

All students are required to attend the class. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Students must complete all assignments and take all quizzes, mid-term exam and final exam ON THE DATES DUE. Talking in class, using cell phones, coming late, leaving the room at times other than at break time is not allowed. Plagiarism/cheating will result in the grade "F" and a report to the administration.

# **ASSIGNMENTS & QUIZZES**

Assignments are due on the date and at the time specified in the course management program. You have to register in the tools by the second meeting.

Quizzes will take place at the beginning of the course, after collecting assignments and answering questions. Quizzes are designed to last 20 minutes and are based on the material in the assignment.

### **TESTING**

| Classroom activities | every week   | 10% |
|----------------------|--------------|-----|
| Assignments          | every week   | 10% |
| Quizzes              | as scheduled | 10% |
| Mid-term exam        | as scheduled | 30% |
| Final exam           | as scheduled | 40% |

There will be no make-up for a missed participation in a classroom activity. No make-up exams will be given unless you have the instructor's <u>prior</u> approval obtained in person <u>before</u> the exam date, with the exception of an extreme emergency. Late assignments will get no credit or reduced credit. *Students will not be allowed to use computers or cellular phones during tests.* 

#### **GRADING**

Grades will be determined according to the following percentages awarded for completed work:

| 100-93 | 92-90 | 89-87 | 86-83 | 82-80 | 79-77 | 76-73 | 72-70 | 69-67 | 66-60 | 59-0 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Α      | A-    | B+    | В     | B-    | C+    | С     | C-    | D+    | D     | F    |

### **OTHER COMMENTS**

- Please participate. What you put into the class will determine what you and others get out of it. You will be asked to go to the board to solve exercises.
- 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.

## **SCHEDULE OF TOPICS**

Please read every chapter of the textbook before you come to class

| Session | Date  | Topics  |        |  |
|---------|-------|---|--------|--|
| 1       | 01/22 | The Database Environment  | 1      |  |
| 2       | 01/29 | The Database Development Process  | 2      |  |
| 3       | 02/05 | Modeling Data in the Organization   | 3      |  |
| 4       | 02/12 | The Enhanced E-R Model and Business Rules   | 4      |  |
| 5       | 02/19 | Logical Database Design and the Relational Model; Physical Database<br>Design and Performance | 5, 6   |  |
| 6       | 02/26 | Normalization   | 7      |  |
| 7       | 03/05 | Introduction to SQL; Advanced SQL   | 8, 9   |  |
| 8       | 03/12 | Midterm Exam  | 1-9    |  |
|         | 03/19 | SPRING RECESS   |        |  |
| 9       | 03/26 | The Client-Server Database Environment  | 9      |  |
| 10      | 04/02 | The Internet Database Environment   | 10     |  |
| 11      | 04/09 | Data Warehousing and Data Mining  | 11     |  |
| 12      | 04/16 | Data Quality and Data Integration   | 12     |  |
| 13      | 04/23 | Data and Database Administration; Distributed and Object-Oriented Databases                   | 13     |  |
| 14      | 04/30 | Course Project Presentations and Defense  | 14, 15 |  |
| 15      | 05/07 | Final   | 1-15   |  |

# **MODIFICATION OF THE SYLLABUS**

This syllabus was updated on December 19, 2014. The instructor reserves the right to modify this syllabus at any time during the semester. An announcement of any changes will be made in the classroom.