



Course Title:	Advanced Systems Analysis and Design	Instructor:	Prof. Serge Ruiz
Course No:	BA 352	Phone:	949-232-3323
Units:	3 units (= 45 lecture hours)	E-mail:	sruiz@lincolnuca.edu
Class Hours:	Tuesday 6:30 pm – 9:15 pm	Office Hours:	See schedule
Semester:	Fall 2016	Office Number:	Room 402

### **REQUIRED MATERIALS**

**Textbook**: <u>Modern System Analysis and Design</u>, by Jeffrey A. Hoffer, Joey F. George, and Joseph S. Valacich, Prentice Hall, 2007, ISBN: 978-0132240765

# **COURSE DESCRIPTION**

Analysis of real world information systems. Included are requirements analysis, data flow diagrams, data dictionaries, systems proposals and design. (3 units) Prerequisite: BA 260 or BA 350

### LEARNING OBJECTIVES

Develop an understanding of "information systems development".

Build an understanding of the Systems Development Life Cycle (SDLC) the processes required to develop information systems.

Analyze a business need for information and develop an appropriate strategy to solve the problem and hence provide the required information service.

Prepare and use various information-gathering techniques for eliciting user information requirements.

Understand and create a process model such DFD (Data Flow Diagrams).

Understand and create a Logic Model such decision trees and structure English, and decision table.

Produce appropriate systems documentation at each phase of systems development.

### INSTRUCTIONAL METHODS

The course is a mix of lectures, practical exercises and a course project, to be delivered by the end of the term.

### **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

Most assignments will be from the textbook. Each assignment is due at the beginning of the following class. You can return your assignments electronically if you desire. 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%
Project	April 26, 2016	30%
Mid-term exam	March 22, 2016	30%
Final exam	May 5, 2016	30%

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
А	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.
- If you miss a class, you are responsible for getting notes/slide printouts on the material covered from a classmate or the instructor.
- Questions and comments during the class are welcome. Do not hesitate to ask questions do not leave anything unclear for you.

## SCHEDULE OF TOPICS

Session	Date	Topics	Chapters
1	01/19	Systems, Roles, and Development Methodologies	1
2	01/26	Understanding and Modeling Organizational Systems	2
3	02/02	Organizational Systems; Project Management	3
4	02/09	Information Gathering: Interactive Methods	4
5	02/16	Information Gathering: Unobtrusive Methods	5
6	02/23	Agile Modeling and Prototyping	6
7	03/01	Using Data Flow Diagrams	7
8	03/08	Analyzing Systems Using Data Dictionaries	8
	03/15	SPRING RECESS	
9	03/22	Midterm Exam	1-8
10	03/29	Designing Database	13
11	04/05	Process Specifications and Structured Decisions	9
12	04/12	Designing Effective Output	11
13	04/19	Designing Effective Input	12
14	04/26	Project presentation	
15	05/03	Final Exam	1-13

### **MODIFICATION OF THE SYLLABUS**

This syllabus was updated on December 20, 2015. 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.