

# Lincoln Aniversity

## BA 352

**Advanced System Analysis and Design** 

#### COURSE SYLLABUS

Spring 2019

Prof. Sergey Aityan, PhD, DSc
Tuesday, 3:30 PM – 6:15 PM
3 units (45 lecture hours)
Mastery 2 (M2)
Tuesday, 11:15 AM – 12:15 PM
Wednesday, 11:15 AM – 12:15 PM
Additional office hours by appointment.
e-mail: <u>aityan@lincolnuca.edu</u>
<b>a</b> : (510) 628-8016

Textbook: 1. Textbook:

Jeffrey A. Hoffer, Joey F. George, and Joseph S. Valacich, (2007), Modern System Analysis and Design, 5th Edition, Prentice Hall ISBN: 978-0132240765 \*\*\* Previous editions of this book are okay too \*\*\*

#### 2. Course Lecture Notes:

Sergey Aityan (2019). *Advanced System Analysis and Design*, Lincoln University, <u>http://elearning.lincolnuca.edu</u>

Last Revision: January 4, 2019

#### CATALOG DESCRIPTION

Analysis of real world information systems. Included are requirements analysis, data flow diagrams, data dictionaries, systems proposals and design. (3 units) Prerequisite: BA 160 or BA 350

#### **COURSE OBJECTIVES**

To introduce business students to the concepts, required skills, methodologies, techniques, and tools essential for the successful development of information and other business software systems. Students will learn system development environment and software design origination process, how to identify, select, initiate, and plan software system development and integration projects, determine system requirements, structure system processes, develop system specifications, and user-machine interaction.

#### PROCEDURES AND METHODOLOGY

Lecture method is used in combination with a supervised business case study. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity.

This is a direct classroom instruction course.

#### **COURSE PROJECT**

Every student must complete and submit a course project. The project includes high level design of information, transaction or control system.

#### REQUIREMENTS

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. 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 the given questions. Each exam includes six questions. The essay must be written clearly and easy to read, 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 final exam is comprehensive, i.e. includes the whole course. The exams are neither "open book" nor "open notes."

Cheating in exam results in immediate termination of the exam, grade "F" with ZERO points, and report to the dean.

#### **GRADING AND SCORING**

All activities will be graded according to the points as shown below.

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

In exams every answer is graded by points from 0 to 100 and the total points for an exam are calculated as the average of the points received for all answers in the exam.

The final grade for the course will be given as the total weighted score for all activities according to the percentage shown in the table below.

Activity	Time	Percent
Quizzes, home tasks, and	Every week	20%
classroom activities		
Course project		20%
Mid-term exam	In the middle of the course	30%
Final exam	Last week of the course	30%

If both grades for the midterm and final exams are "F" the term grade for the course is "F" regardless of the grades for the project and classroom activities.

Lectures		Торіс	Chapters		
#	Date				
1	15-Jan	The System Development Environment	Ch. 1		
2	22-Jan	22-Jan The Origins of Software			
3	29-Jan	Managing an Information System Project	Ch. 3		
4	5-Feb	Identifying and Selecting Systems Development Projects	Ch. 4		
5	12-Feb	(a) Initiating and Planning Systems Development	Ch. 5		
		Projects	Ch. 6		
		(b) Determining System Requirements			
6	19-Feb	Structuring System Process and Logic Requirements	Ch. 7		
7	26-Feb	Structuring System Logic and Data Requirements	Ch. 8, 9		
8	5-Mar	Midterm Exam	Ch. 1 - 9		
	12-Mar	Spring Break – No Classes			
9	19-Mar	Designing Databases	Ch. 10		
10	26-Mar	Designing Forms and Reports	Ch. 11		
11	2-Apr	Designing Interfaces and Dialogues	Ch. 12		
12	9-Apr	(a) Finalizing Design Specifications	Ch. 13		
		(b) Designing Distributed and Internet Systems	Ch. 14		
13	16-Apr	(a) System Implementation	Ch. 15		
		(b) Maintenance of Information Systems	Ch. 16		
14	23-Apr	Comprehensive Final Exam	Ch. 1 – 16		
15	30-Apr	Course Project Presentations			

#### **COURSE SCHEDULE**

#### CHEATING AND PLAGIARISM

Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit. Acts of cheating include, but are not limited to, the following:

- plagiarism;
- copying or attempting to copy from others during an examination or on an assignment;
- communicating test information with another person during an examination;
- allowing others to do an assignment or portion of an assignment;
- using a commercial term paper service.

Cheating or plagiarism will result in zero points and letter grade F for an assignment, project, or exam and a report of the incident to the Dean of Students, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action.

#### LETTERS OF RECOMMENDATION

Letters of recommendation will be provided upon request to students, who have completed all course requirements and received grade "A" for the course.

#### CENTER FOR TEACHING AND LEARNING

Assignments and projects require students to actively use resources of the library. A detailed guide to business resources of the library as well as the description of Lincoln University approach to information literacy are available at the <u>Center for Teaching and Learning</u> website (ctl.lincolnuca.edu).

#### 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.
- Use of cellular phones is prohibited during class or exams. Cellular phones must be turned off or silenced.
- Questions and comments during the class are welcome. Do not hesitate to ask questions do not leave anything unclear for you.

### COURSE LEARNING OUTCOMES

	Course LO	Program LO	Institutional LO	Assessment
1	Students are expected to develop familiarity with the theoretical and practical side of Management Information Systems	PLO 1	ILO 1b, ILO 2b	Course project, quizzes, midterm/final exam
2	Students must be able to identify a problem area and propose an information system to solve the problem.	PLO 2	ILO 1b, ILO 2b, ILO 4b	Course project
3	Students are expected to propose and work on initial specification of an information system	PLO 4	ILO 4b, ILO 5b, ILO 6b	Course project
4	Students are expected to work on a team to identify a problem area and propose a management information system to solve the problem.	PLO 5	ILO 4b, ILO 5b	Course project

#### **MODIFICATION OF THE SYLLABUS**

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