



# Lincoln University

## BA 352 – Advanced System Analysis and Design

### COURSE SYLLABUS

Spring 2018

- Instructor:** Prof. Sergey Aityan  
**Lecture Schedule:** Monday, 12:30 PM – 3:15 PM  
**Credits:** 3 units / 45 lecture hours  
**Level:** Mastery 2 (M2)  
**Office Hours:** Monday 11:15 AM – 12:15 PM  
Students are advised to schedule appointments by signing their names on the appointment list which is located on the information board next to the professor's office that will ensure exact appointment time without waiting.  
Additional office hours by appointment  
**e-mail:** [aityan@lincolnuca.edu](mailto:aityan@lincolnuca.edu)  
**☎:** (510) 628-8016
- 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 \*\*\*

**Last Revision:** January 3, 2018

### 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 260 or BA 350

### EDUCATIONAL 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.

**COURSE LEARNING OUTCOMES<sup>1</sup>**

	<b>Course LO</b>	<b>Program LO</b>	<b>Institutional LO</b>	<b>Assessment Activities</b>
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 have to 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

**PROCEDURES AND METHODOLOGY**

*This is a direct classroom instruction course.*

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.

Assignments and projects require students to actively use resources of the library. Detailed guide to business *resources of the library* as well as the description of Lincoln University approach to *information literacy* are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

**COURSE PROJECT**

Every student must complete and submit a course project. The project includes high level design of a 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.

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<sup>1</sup> Detailed description of learning outcomes and information about the assessment procedure are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

**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	A	A-	B+	B	B-	C+	C	C-	D+	D	F
Points	93-100	90-92	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 classroom activities	Every week	20%
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.

**COURSE SCHEDULE**

Lectures		Topic	Chapters
#	Date		
1	22-Jan	The System Development Environment	Ch. 1
2	29-Jan	The Origins of Software	Ch. 2
3	5-Feb	Managing an Information System Project	Ch. 3
4	12-Feb	Identifying and Selecting Systems Development Projects	Ch. 4
	19-Feb	President’s Day – No classes	

5	26-Feb	(a) Initiating and Planning Systems Development Projects (b) Determining System Requirements	Ch. 5 Ch. 6
6	5-Mar	Structuring System Process and Logic Requirements	Ch. 7
7	12-Mar	Structuring System Logic and Data Requirements	Ch. 8, 9
8	19-Mar	Midterm Exam	Ch. 1 - 9
9	26-Mar	Designing Databases	Ch. 10
10	2-Apr	Designing Forms and Reports	Ch. 11
11	9-Apr	Designing Interfaces and Dialogues	Ch. 12
12	16-Apr	(a) Finalizing Design Specifications (b) Designing Distributed and Internet Systems	Ch. 13 Ch. 14
13	23-Apr	(a) System Implementation (b) Maintenance of Information Systems	Ch. 15 Ch. 16
14	30-Apr	Comprehensive Final Exam	Ch. 1 – 16
15	7-May	Course Project Presentations	

### **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:

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

Penalties for cheating and plagiarism range from a 0 or F on an assignment, through an F for the course, to expulsion from the university. Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report 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.

### **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. Announcements of any changes will be made in a classroom.