



# Lincoln University

Course Title	Advanced Systems Analysis & Design	Instructor: Dr. Walter Kruz
Course No.	BA 352	Hours:By arrangement
Units	3 (45 lecture hours)	Tues&Sat 11AM-12Noon
Class Hours	Sat 12:30PM – 3:15PM	wrkruz@lincolnuca.edu
Semester	Fall 2017	Update: Aug 10, 2017

## Required Textbook

- Modern Systems Analysis and Design, Hoffer et al, Pearson 6<sup>th</sup> Edition, 2011, ISBN 13: 978-0-13-608821-9, ISBN 10 0-13-608821-X
- Various other resources from industry publications

## 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 (3 units).*

## Detailed Course Description

Business analysis requires detailed understanding of information systems analysis and design. As data analysis becomes ever more important to the success of business managers, knowledge of databases, their design, implementation, and maintenance have become basic requirements. This course will enable students, as future business managers, to interface competently with technical staff in the design and analysis of information technology systems and services.

## Course Learning Outcomes

	<b>Course Learning Outcome</b>	<b>Assessment Activities</b>
1	Evaluate foundations of systems development	Exams, homework, project evaluation
2	Conduct planning of information systems development	Exams, homework, project evaluation
3	Utilize analytical methods to structure system requirements	Exams, homework, project evaluation
4	Apply design techniques to develop information systems	Exams, homework, project evaluation

5	Apply implementation methods to deploy an information system	Exams, homework, project evaluation
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### **Instructional methodology**

This class offers a highly interactive learning environment. All students will participate in class discussions, research findings, and class exercises. Short oral presentations may also be assigned. Assignments will be given weekly and may consist of textbook exercises and research questions. Attendance is highly encouraged as exams include questions from class discussions. Students will benefit from using a laptop, the computer lab, and the school library.

Punctuality and deliverables are very important. All assignments are due on the date indicated and collected during the first 10 minutes of the class. Late assignments will not be collected or graded. Make-up exams are allowed only due to a documented medical excuse. Students are encouraged to study and work in groups for enhanced learning.

Project work, if assigned, is designed to familiarize students with issues of current information systems. Projects may be assigned individually or as a group project. If as a group, the grade is the same for all members. Drafts may be evaluated on an agreed upon schedule during the semester. Final deliverable will be turned in as a hard copy. Plagiarism is not allowed; all sources must be referenced. APA standard is required.

### **Grading**

Typically, the class will consist of two or three exams of equal weight throughout the semester. All exams are individual deliverables. They consist of short answers related to the material being discussed. The exam format is closed book with no electronic devices allowed. Failure to follow instructions during exams will result in 0 points earned for that exam.

Quizzes, homework assignments, exams, and the project allow a student to accumulate points throughout the semester. These total earned points are added and compared against the total possible as a percentage.

Exams and Project are typically worth 100 pts each (~ 75% of the total points). Homework and quizzes from 5-10 pts (~ 25% of the total points). Assuming that 2 exams, one project, and 10 homework/quiz assignments are given, this will mean a total possible of 400 points could be accumulated. The student grade will be calculated as follows:

$$\text{Grade} = (\text{Student's score} / \text{Total possible points}) * 100 = \%$$

A final grade is then assigned as follows:

95 – 100%                      A

90 – 94%	A-
87 – 89%	B+
84 – 86%	B
80 – 83%	B-
76 – 79%	C+
70 – 75%	C
66 – 69%	C-
60 – 65%	D
Less than 59%	F

### Course Outline and Assignments

This is a proposed schedule. It will change according to class progress or student interests.

Session	Chapter to be discussed	Assignments
Session 1	Chapter 1 – The Systems Development Environment	Do problems 1-6 at end of Chapter
Session 2	Chapter 2 – The Origins of Software	Do problems 1-6 at end of Chapter
Session 3	Chapter 3 – E business 1	Do problems 1-6 at end of Chapter
Session 4	Chapter 3 – Managing the Information Systems Project	Do problems 1-6 at end of Chapter
Session 5	Exam # 1	
Session 6	Chapter 4 – Identifying and Selecting Systems Development Projects	Do problems 1-6 at end of Chapter
Session 7	Chapter 6- Determining System Requirements	Do problems 1-6 at end of Chapter
Session 8	Chapter 7 – Structuring System Process Requirements	Do problems 1-6 at end of Chapter
Session 9	Exam # 2	
Session 10	Chapter 7 – Appendices (Object Oriented Analysis)	Do problems 1-6 at end of Chapter
Session 11	Chapter 9 – Designing Databases	Do problems 1-6 at end of Chapter
Session 12	Chapter 10– Designing Forms & Reports	Do problems 1-6 at end of Chapter
Session 13	Chapter 11-Designing Interfaces	Do problems 1-6 at end of Chapter
Session 14	Chapter 13-System Implementation	Do problems 1-6 at end of Chapter
Session 15	Exam # 3	

**Faculty Information:**

Academic: BA/BS Physics/Mathematics, MS Engineering, MBA, DBA.

Professional: Dr. Kruz is an industry consultant. His expertise includes senior management experience in operations, engineering, project management, and information systems. He participates in international projects focusing on systems integration. His research area includes competitiveness, innovation, and business performance.

## Appendix. Program and Institutional Learning Outcomes.

<b>Institutional Learning Outcomes (ILOs)</b>	
<i>MBA Graduates of Lincoln University should be able to:</i>	
<b>1b</b>	Recognize and be able to work with the components of reasoning and problem solving; understand concepts, assumptions, purpose, conclusions, implications, consequences, objections from alternative viewpoints, and frame of reference.
<b>2b</b>	Gather and assess relevant information, using abstract ideas to interpret it effectively; to develop well-reasoned conclusions and solutions, and test them against relevant criteria and standards
<b>3b</b>	Be exemplary business professionals and try to ensure that the products of their efforts will be used in socially responsible ways, will meet social needs, and will avoid harmful effects to health and welfare
<b>4b</b>	Lead by example in order to create highly collaborative organizational environment, and be able to develop and use strategies to encourage employees at all organizational levels to do the same.
<b>5b</b>	Set goals and have a vision of the future. The vision should be owned throughout the organization. As effective leaders, they should habitually pick priorities stemming from their basic values.
<b>6b</b>	Continually look for, develop, and offer new or improved services, and be able to use original approaches when dealing with problems in the workplace.
<b>7b</b>	Demonstrate fluency in the use of tools, technologies and methods in the field. They should know how to evaluate, clarify and frame complex questions or challenges using perspectives and scholarship from the business discipline.

<b>Program Level Outcomes (PLOs)</b>	
<i>Students graduating our MBA program will be able to:</i>	
<b>1</b>	Develop and exhibit applied and theoretical knowledge in the field of management and business administration
<b>2</b>	Use theoretical knowledge and advanced problem-solving skills to formulate solutions and identify risks in the following fields: international business, finance management, general business, human resources management, management information systems, marketing management
<b>3</b>	Communicate within a highly specialist environment that allows the presentation of critiques of complex strategic matters
<b>4</b>	Demonstrate autonomy, creativity, and responsibility for managing professional practices
<b>5</b>	Demonstrate leadership and set strategic objectives for team performance
<b>6</b>	Identify ethical issues/problems in business organizations and reach decisions within ethical framework