KOMAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

Analysis and Design of Information Systems Course Syllabus			
Course Title	**Analysis and Design of Information Systems**		
Course Code	**INF4320**	**No. of Credits**	**3**
Department	**Information Management**	**Collage**	**College of Business**
Pre-requisites Course Code	**Foundation of IT management**	**Co-requisites Course Code**	
Course Coordinator(s)	**Hemin Ibrahim**		
Email	**hemin.ibrahim@komar.edu.iq**	**Office No. 304**	**IP No. 128**
Other Course Teacher(s)/Tutor(s)			
Class Hours	**Monday and Wednesday from 12:00 to 13:30.**		
Office Hours	**Sunday and Tuesday from 09:00 AM to 10:00 AM**		
Course Type	**❒ Department Requirement**		
Offer in Academic Year	**☐ Fall Semester 2015**		

COURSE DESCRIPTION

Analysis and design of information system course is mainly designed for undergraduate students in information management department, and the purpose of this course is to help students develop an understanding of how business information systems are developed through the actions of systems planning, analysis, design, implementation and maintenance. The main modelling concepts relevant to both traditional (structured) and object-oriented (OO) methods to systems progress are also presented. The course shows a range of methodologies and techniques to design and analysis a modern systems.

COURSE OBJECTIVES

- The main objective of this course is to offer students with general foundation of systems analysis and design to effectively and efficiently project and implement system.
- To understand and acquire practical knowledge of information systems development life cycle.
- To prepare students for the career of a Systems Analyst and understand the existing job market.
- To study different diagrams and build models of an information system such as use case diagrams, sequence diagrams, etc.

COURSE LEARNING OUTCOMES

After participating in the course, the students should be able to:

1. Understand and apply the information systems concepts required in systems analysis and design.
2. Analyze and implement different stages of life cycle of information systems development.
3. Apply modern tools, techniques and software to analyze and design information systems.
4. Apply the object-oriented approach to systems development.
5. Using and understanding Use cases, class diagram, sequence and activity diagrams.
6. Acquire skills needed for implementing and maintaining systems.

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GUIDELINES ON GRADING POLICY

A	=	95	–	100	Points	
A–	=	90	–	94	Points	
B+	=	87	–	89	Points	
B	=	83	–	86	Points	
B–	=	80	–	82	Points	
C+	=	75	–	79	Points	
C	=	70	–	74	Points	
C–	=	65	–	69	Points	
D+	=	60	–	64	Points	(65 is the passing grade. A 100 is your goal)
D	=	55	–	59	Points	
D–	=	50	–	54	Points	
F	=	0	–	49	Points	
W	Withdrawal					
I	Incomplete					

COURSE CONTENT

Course topics include:

1- Information systems development life cycle.
2- System Development tools
3- Systems Planning
4- Systems analysis
5- Systems Design
6- Systems Implementation
7- Maintenance

COURSE TEACHING AND LEARNING ACTIVITIES

Course Teaching and Learning Activities: (short description)

1. Interactive class discussion
2. Homework - Tutorials
3. Lectures
4. Assignments
5. Practical sessions
6. Quizzes and tests

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COURSE ASSESSMENT Tools

Assessment Tool	Description	Weight
Quizzes	Students will take 6 quizzes, and choose best 5 of them	15%
Assignment and Project	Students have one individual assignment and one group project.	25%
Midterm	The first test will be planned to cover week 1-7	20%
Test	Students have one test after midterm exam.	10%
Final Exam	The final exam will be designed to cover all lectures.	30%
Extra Grade	The students can get the extra grades by doing extra assignments and projects to **improve their knowledge.**	5%

ESSENTIAL READINGS:

Textbooks:
Modern System Analysis and Design. Jeffrey Hoffer, Joey George, and Joseph Valacich, Prentice Hall, 2013, 7th Edition.
Or
Systems Analysis and Design: An Object Oriented approach with UML Version 2.0, 4th Ed, by Dennis, Wixom, and Tegarden, Publ. Wiley, ISBN 978-1-118-03742-3.
References:

1. Systems analysis and design / Gary B. Shelly, Thomas J. Cashman, Harry J. Rosenblatt, 10th Edition.
2. Kendall,K.E.,&Kendall,J.E.(2010).Systems Analysis and Design 8th edition. New York: Prentice Hall.

COURSE POLICY *(including plagiarism, academic honesty, attendance etc.)*

Attendance Policy

Students are expected to attend all the classes for the entire semester. Students are responsible for material presented in lectures. Attendance is taken at the beginning of each class. Only students with official KUST absences, family crises, and illness are excused from class. This in no way cancels any responsibility for work due or assigned during absence. The student who misses **more than 10 percent** of the course classes will be placed on probation.

Make-up Policy

Because all examinations are announced in advance a zero will be assigned to any missed examination unless a student has a legitimate acceptable reason, such as illness, for not being able to take the examination during all the days when the examination was announced.

Academic Dishonesty

Any type of dishonesty (plagiarism, copying another's test or home-work, etc) will NOT be tolerated. Students found guilty of any type of academic dishonesty are subject to failure in this course, plus further punishment by the University Consul.

Deadlines/Due Dates

Recognizing that a large part of professional life is meeting deadlines, it is necessary to develop time management and organizational skills. Failure to meet the course deadlines will result in penalties. **Late assignments will be accepted with a penalty if they are less than 3 days passed their respective due dates, otherwise a zero will be assigned to those assignments**. Work may be submitted early.

GUIDELINES FOR SUCCESS

1. Attend classes (on time).
2. Ask question any time you want. If you do not understand something, please, please and please ask. You can ask during the class, in tutorials, office hours and by email.
3. Solve all homework and lab questions.

CELL PHONES

All cell phones are expected to be switched to vibrating mode if available and turned off completely if this feature is not an option. Disruption of class due to a cell phone will not be tolerated and the student will be asked to leave class. All other electronic equipment that the faculty member deems not essential to the provision of academic learning is prohibited from being used in class.

REVISIONTO THE SYLLABUS

This syllabus is subject to change. It is the duty of the instructor to inform students of changes in a timely fashion after approval of Quality Assurance Office (QAO).

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Course calendar: Please check the academic calendar for 2015/2016 (Subject to Change)

Week	Beg/End Dates	Topics	Assessment
1	28 Sep – 1 Oct	- Introduction to Information system analysis and design - Define data, information and system - Describe System analysis, system design and System Analyst	
2	4 Oct – 8 Oct	- The system development life cycle - System development Methods - Structured vs object oriented - System Development tools - Modeling - Prototyping - CASE tools	Quiz #1
3	11 Oct – 15 Oct	- Phase I – Systems Planning - Business in 21st century - System aspects of B2C and B2B - Web Support - Analyzing the Business Case - SWOT in system design.	Assignment #1
4	18 Oct – 22 Oct	- Managing and controlling systems projects - Gantt Chart	Quiz #2
5	25 Oct – 29 Oct	- Phase II – Systems Analysis - Investigating system requirements - Interviews - Team-Based Techniques: JAD, RAD, and Agile Methods	
6	1 Nov – 5 Nov	- Structuring system process requirements - Data and process Modeling - Introduction to Data Flaw Diagram - Creating DFD	Quiz #3
7	8 Nov – 12 Nov	- Object oriented analysis and design - Use case - Activity Diagram	
	15 Nov – 19 Nov	Midterm Exam	
8	22 Nov – 26 Nov	- Sequence Diagrams - Object modeling and class diagrams - Developing Strategies	Project #1

		- Web 2.0 and cloud computing	
9	29 Nov – 3 Dec	- Phase III – Systems Design - User Interface Design - Designing effective input and output -	Quiz #4
10	6 Dec – 10 Dec	- Designing Databases	
11	13 Dec – 17 Dec	- Web-based Data Design - Entity relationship Diagram ERD - System Architecture	Quiz #5
12	20 Dec – 24 Dec	Test	
	27 Dec – 31 Dec	New Year 2016	
13	3 Jan – 7 Jan	- Phase IV – Systems Implementation - Managing system implementation and programming process	Quiz #6
14	10 Jan – 14 Jan	- Documentation - Testing	
15	17 Jan – 21 Jan	Review Week	
	24 Jan -28 Jan	Final Exam	