KINGDOM OF SAUDI ARABIA
IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY
COLLEGE OF COMPUTER AND INFORMATION SCIENCES
INFORMATION SYSTEMS DEPARTMENT
BACHELOR IN INFORMATION SYSTEMS

المملكة العربية السعودية
جامعة الإمام محمد بن سعود الإسلامية
كلية علوم الحاسب والمعلومات
قسم نظم المعلومات
بكالوريوس نظم المعلومات

SYLLABUS

IS1235: Systems Analysis and Design

CREDIT HOURS	4 (Lec 3 hrs+ Tutorial 2 hrs)		PREREQUISITE	IS1130

Instructor:
Contact information and office hours
Office No: To be announced (TBA)
Office Hours: TBA
E-mail: _____@imamu.edu.sa

COURSE DESCRIPTION
The aim of the course is to prepare students familiar with different database system architectures, their advantages and disadvantages, transaction processing, concurrency control protocols, recovery management techniques and indexing structures. Apart from these students acquire the skills of database management and administration using Oracle.

COURSE LEARNING OUTCOMES (CLOs)		Aligned SOs
1	**Knowledge and Understanding**	
1.1	Define and explain information systems analysis and design and SDLC.	1(P)
1.2	Comprehend system development methodologies and object oriented approach to systems analysis and design.	1(P)
1.3	Describe system implementation concepts	1(I)
1.4		
1.5		
2	**Skills :**	

2.1	Analyze an information system to model system functionality, system processes, flow of data and control, and interaction between system components.	1(A)
2.2	Design an information system along with its interfaces based on the functional, structural and behavioral analysis performed	2(P)
2.3	Apply analysis and design techniques at intermediate level on a real-world problem	2(P)
2.4		
2.5		
3	**Values:**	
3.1	Function effectively on teams to accomplish a common goal.	5(P)
3.2	Present a topic in a compelling manner.	3(P)
3.3		
3.4		
3.5		

TEACHING Strategies
Lectures Self-Learning

No	List of Topics	Contact Hours	Self-Learning
1	The Systems Development Environment (Ch1)	6	
2	Object-Oriented Analysis and Design- Project Management (Ch3a)	2	
3	Structuring System Process Requirements (Ch7)	6	
4	Object-oriented analysis and design: use Cases (Ch7a)	6	
5	Object-oriented analysis and design: and activity diagram (Ch7b)	8	
6	Business process modeling (Ch7d)	8	
7	Object-oriented analysis and design: object modelling - Class diagrams (Ch8a)	10	
8	Object-oriented analysis and design: sequence diagram (Ch7c)	6	
9	Designing Interfaces and Dialogues	2	4
10	Designing Distributed and Internet Systems	2	3
11	System Implementation	2	3
12	Project Presentation	2	
	Total	**60**	**10**

TEXT BOOK

Modern Systems Analysis and Design, Hoffer, George, & Valacich (2020), 9th ed/Global ed. Pearson Education ISBN: 9781292351629

REFERENCES

Systems Analysis and Design with UML Version 2.0: An Object-Oriented Approach, 4th edition, Alan Dennis, Barbara Haley Wixom and David Tegarden, John Wiley & Sons, Inc., 2012. ISBN-13: 978-1118037423/ISBN-10: 1118037421

	Course Assessment Methods		
No	**Assessment Method**	**Due Week**	**% of Total Assessment**
1	**Quiz**	4	10
2	**Assignment**	9	10
3	**Midterm**	7	20
4	**Project / Lab Exam**	11	20
5	**Final Exam**	13	40