



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

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

SYLLABUS

Course Code: IS-6134 Course Name: Advanced Database Management

CREDIT 4		PREREQUISITE	None
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Instructor:

Contact information and office hours

Office No: To be announced (TBA)

Office Hours: TBA

E-mail: @imamu.edu.sa

COURSE DESCRIPTION

There has been a rapid growth and development in the field of relational databas management systems. This course provides an in-depth analysis of advanced database areas as well as the basics of database management systems. It explores the different SQL concepts, starting from the very basic DDL and DML statements to constraints and views. The theme of this course is the potential of various database management systems. The course combines advanced techniques with practical advice and many new ideas, methods and examples for database management students, system specialists and programmers.

	COURSE LEARNING OUTCOMES (CLOs)	Aligned SOs
1	Knowledge and Understanding	
1.1	Outline managerial issues and technologies related to databases	K1
1.2	Distinguish between different types of databases in order to make better choices	K2
1.3	Articulate the required combination of hardware, software, and	K1





	telecommunications for the smooth operation of a database	
2	Skills:	
2.1	Develop security and disaster recovery plans for databases	S2
3	Values:	
3.1	Function effectively individually as well as on teams to accomplish a	V3
	common goal	
3.2	Write course project reports abiding all ethical standards using	V2
	leadership and management talents.	
3.3	Demonstrate Professionalism and responsibility for maximum impact to	V1
	achieve desired goal.	

TEACHING Strategies

Class lectures, Assignment, Project explanation session.

N	List of Topics	Contact	Self-
0		Hours	Learning
1	Introduction to DBMS	4	
2	Advanced SQL	8	
3	Advanced TransactionProcessing and Recovery – Part I	4	
4	Advanced TransactionProcessing and Recovery- Part II	4	
5	Data Security	4	
6	torage and Indexing	4	
7	Distributed Databases	4	
8	Object Databases	4	
9	Project Presentations	4	
	Total	40	

TEXT BOOK

Advanced Database Management System ISBN-10: 9350536188

REFERENCES

Advanced Database Management System Paperback – January 1, 2011 by Shilbhadra Dasgupta Rini Chakrabarti, ISBN-10 : 8177228021





	Course Assessment Methods			
No	Assessment Method	Due Week	% of Total Assessment	
1	Quizzes	3	10	
2	Assignments	5	10	
3	Midterm	8	20	
4	Project	10	20	
5	Final Exam	11	40	