

Date:	Examination No.: 15367	Version:2023	Start: 1/9/2021
Module Name - Code	Advance Database - 15367		
Module Language:	English		
Responsible:	Dr Polla Fattah		
Lecture (s):	Dr Polla Fattah M Aram		
College:	College of Engineering – Salahaddin University		
Duration:	15 week – 1 semester		
Course outcomes:	On successful completion of the module students should be able to demonstrate a hands on understanding of advanced database topics		
Course Content:	<ol style="list-style-type: none"> 1- Introduction to the course 2- Revisiting SQL + ER-Modelling + Normalization 3- Intermediate SQL 4- Indexing 5- Transactions 6- Concurrency Control 7- Recovery Systems 8- Query Processing 9- Data Analysis OLAP 10- Data Mining 11- Physical Storage Structure + Data Storage Structure 12- Database Architectures + Blockchain Databases 		
Literature:	<ul style="list-style-type: none"> • Reference Book for this Course <ul style="list-style-type: none"> ○ Abraham Silberschatz, Henry Korth and S. Sudarshan - Database System Concepts. 7-McGraw-Hill Education (2020) • Alternative Book <ul style="list-style-type: none"> ○ Ramez Elmasri and Shamkant B. Navathe. Fundamentals of Database Systems (7th. ed.). Pearson (2015) • Alternative Lectures <ul style="list-style-type: none"> ○ https://www.youtube.com/playlist?list=PLSE8ODhjZXjasrEd2_Yi1deeE360zv5O 		
Type of Teaching:	2 hrs in lectures 2 hrs laboratory working.		
Pre-requisites:	5113 Database Design		
Frequency:	Annually in Fall Semester		
Requirements for credit points:	For the award of credit points it is necessary to pass the module. Not attending final exams will result in failure in the subject Active participation in the lab. Student's attendance is required in all classes. Absence in more than 15% of the classes results in an automatic withdrawal from the subject.		
Credit point:	5		

Grade Distribution:	The Grade is generated from the examination result(s) with the following 30% Final Theoretical Exam 20% Final Practical Exam 20% Individual Project 30% Practical weekly exams + Quizzes
Work load:	<ul style="list-style-type: none">• 26 Hours Theory• 20 Hours Practical• 60 Home Study• 4 Hours Exams• 20 Hours Project• 20 Exam Preparation• 150 Hours Total