

CS410-510	Databases - Spring 2015			
Date	Description	Deadline	Notes	Pre-requisites
1/12/2015	Introduction to databases systems		Chapter-2 of the course textbook	
1/14/2015	Relational Algebra and Set Theory - SELECT, PROJECT, RENAME, UNION		Chapter-6 of the course textbook	Install mySQL and have the laptop available in the class
1/19/2015	Holiday			
1/21/2015	Relational Operators - EQUI, INNER and OUTER Joins		Chapter-6 of the course textbook	Install mySQL and have the laptop available in the class
1/26/2015	Relational Model Concepts - Schema Definition		Chapter-3 of the course textbook	
1/28/2015	Relational Model - Create Table, Primary Key, Foreign Key, Constraints, Default Values	Assignment-0	Chapter-3/4 of the course textbook	
2/2/2015	Data Manipulation - Insert, Update, Delete, Load		Chapter 4 of the course textbook	
2/4/2015	Select queries with aggregates and ordering - Group By and Order By		Chapter 4 and class notes	
2/9/2015	Nested Queries and Stored Procedures		Class notes	
2/11/2015	Materialization of results - Triggers and Views		Chapter 5 of the course textbook	
2/16/2015	Holiday			
2/18/2015	Query Plan - Logical and Physical query plans	Assignment -1	Chapter 5/6 of the course textbook	
2/23/2015	Advanced SQL constructs		Chapter 5/6 of the course textbook	
2/25/2015	Entity Relationship Models		Chapter 7 of the course textbook	
3/2/2015	ER models - Weak Entity Types, Design Issues		Chapter 7 of the course textbook	
3/4/2015	Enhanced Entity Relationship Models		Chapter 8 of the course textbook	
3/9/2015	Modelling Super Classes, Sub classes and inheritance		Chapter 8 of the course textbook	
3/11/2015	Relational Database design using ER and EER	Assignment -2	Chapter 9 of the course textbook	
3/16/2015	Tools for forward and reverse engineering databases	Midterm exam	Class notes	
3/18/2015	XML data model		Chapter 12 of the course textbook	
3/23/2015	Spring Break			
3/25/2015	Spring Break			
3/30/2015	XML query languages		Chapter 12 of the course textbook	
4/1/2015	Programming techniques - Embedded SQL, Dynamic SQL and SQL J		Chapter 13 of the course textbook	
4/6/2015	SQL/CLI and JDBC		Chapter 13 of the course textbook	
4/8/2015	Functional Dependency Part-I		Chapter 15 of the course textbook	
4/13/2015	Functional Dependency Part-II		Chapter 15 of the course textbook	
4/15/2015	Functional Dependency Part-III	Assignment - 3	Chapter 15 of the course textbook	
4/20/2015	Disk Storage and Indexing - Part I		Chapter 17 of the course textbook	
4/22/2015	Disk Storage and Indexing - Part II		Chapter 17/18 of the course textbook	
4/27/2015	Disk Storage and Indexing - Part III		Chapter 18 of the course textbook	
4/29/2015	Revision for the Finals	Assignment - 4		