

951- Database Systems (DB), Tentative Schedule

University of Bonab-Computer Engineering Department-Gholamali Nejad Hajali Irani

Week	Date	Session	Subject	Project Delivery
1	21 shahrivar	1	Course Overview (Course Principles, Syllabus, Projects, Grading Policy...)	
	22 shahrivar			
	23 shahrivar	2	Fundamental Concepts, File System History	
2	28 shahrivar	3	Software Engineering and DBMSs	
	29 shahrivar			
	30 shahrivar			
3	4 Mehr	4	Software Engineering and Data Modeling	
	5 Mehr	5	Relational Model Basic Concepts, Object Oriented Relationships	
	6 Mehr	6	Software Engineering and Data Model Accuracy	
4	11 Mehr	7	Enterprise Education System, Class Practice	
	12 Mehr	8	Introduction to Data Modeling Heuristics and Patterns	Project Requirement Model
	13 Mehr	9	Data Modeling Patterns – Entity, Attributes	
5	18 Mehr	10	Data Modeling Patterns – Relationships, Cardinality	
	19 Mehr			
	20 Mehr			
6	25 Mehr	11	Mapping Data Model to Relational Model	
	26 Mehr	12	Types of Attributes (Composite, Multi-Value, Derived)	Project Use Case Model
	27 Mehr	13	Data Modeling Patterns – Trees and Graphs	
7	2 Aban	14	Data Modeling Patterns – Traps	
	3 Aban	15	Data Modeling Patterns – List Pattern	
	4 Aban	16	Data Modeling Patterns – Status Pattern (Section 1)	
8	9 Aban	17	Data Modeling Patterns – Status Pattern (Section 2)	
	10 Aban	18	Mapping Object Oriented Design to Relational Data Model	Data Model (Version 1.0)
	11 Aban	19	Complete Module Data Modeling (AAA-RBAC)	
9	16 Aban	20	Complete Module Data Modeling (Train System)	
	17 Aban	21	Introduction to CRUD and SQL	
	18 Aban	22	SQL – Select Command, Where Clause	
10	23 Aban	23	SQL – Select Command, Joins	
	24 Aban	24	SQL – Select Command, Group By	Data Model (Version 2.0)
	25 Aban	25	SQL – Insert, Update, Delete Commands	
11	30 Aban			
	1 Azar			
	2 Azar	26	Other SQL Commands	
12	7 Azar	27	Software Engineering and Transaction Concept	
	8 Azar			
	9 Azar			
13	14 Azar	28	ORM Concepts and Frameworks	
	15 Azar	29	JPA and JPQL	Data Model (Version 3.0)
	16 Azar	30	Distributed Transactions (JTA and Java EE Transactions)	
14	21 Azar	31	In-Memory DBMSs	
	22 Azar	32	Parallel and Distributes DBMSs	
	23 Azar	33	Big Data – Introduction	
15	28 Azar	34	Big Data – Architecture	
	29 Azar	35	Big Data - Modeling	
	30 Azar	36	Introduction to Advanced Data Modeling Patterns	
16	To 8 Dey	--	---	Project Implementation