

Week	Date (mins)		Video (mins)		Subjects	Proj
WK 1	3/16 Mon		Chap 00		Flipped Learning Big Data	
	3/18 Wed	28:10	Chap 01	v 01 34:30 v 02 50:58 v 03 02:42	Data, Database, DBMS File System, Data Indep., Instance & Schema Data Models, DB Languages, DB Users, Architecture	
WK 2	3/23 Mon	50:59	Chap 02	v 01 17:20 v 02 33:39	Structure/Definition of Relational Model, Attributes Relationa Schema/Instance, Keys, Schema Diagram	
	3/25 Wed	31:01	Chap 06	v 03 17:39 v 01 13:22	Relational Algebra Select / Project / Union / Set Difference	Proj 1-1
WK 3	3/30 Mon	43:06		v 02 20:03 v 03 23:03	Cartesian Product / Rename Formal Def, Intersection / Nat Join / Assignment	
	4/1 Wed	40:14	Chap 03	v 01 19:46 v 02 20:28	SQL, Create/Drop/Alter Table Basic Structure - Select / From / Where	
WK 4	4/6 Mon	49:47		v 03 22:27 v 04 27:20	Rename, Strings, Null Aggregate Functions, Nested Query	
	4/8 Wed	53:49	Chap 04	v 05 10:40 v 01 23:44 v 02 19:25	Insert, Delete, Update Joins - Natural, Inner/Outer Integrity Constraints, Authorization	
WK 5	4/11 Sat				SQL Lab	1-1 Due
	4/13 Mon	0:40:04	Chap 07	v 01 15:59 v 02 24:05	Design Process Entity, Relationship, E-R Diagram	
	4/15 Wed				Holiday (Moved to 4/11)	
WK 6	4/20 Mon	0:52:15		v 03 24:40 v 04 27:35	Mapping Cardinality Extended E-R Features, Weak Entity Sets	Proj 1-2
	4/22 Wed	0:24:42		v 05 24:42	Logical Design, Design Issues Design Lab	
WK 7	4/27 Mon	0:29:26	Chap 08	v 01 29:26	1NF, Functional Dependency Reviews	
	4/29 Wed				Midterm Exam	
WK 8	5/4 Mon	0:40:13		v 03 40:13	Decomposition	
	5/6 Wed	0:27:47		v 03 27:47	BCNF, Dependency Preservation, 3NF	
WK 9	5/11 Mon	0:45:49		v 04 45:49	Closure of Attribute Sets, Testing for BCNF	
	5/13 Wed	1:03:02	Chap 10	v 01 37:09 v 02 25:53	Physical Storage, Performance Measures RAID	1-2 Due
WK 10	5/18 Mon	0:46:25		v 03 46:25	File org., slotted page, buffer management	
	5/20 Wed	0:54:17	Chap 11	v 01 27:43 v 02 26:34	Ordered index, dense/sparse, primary/secondary B+-tree: structure, search	Proj 1-3
	5/23 Sat	0:42:29		v 03 19:11 v 04 23:18	B+-tree: insertion B+-tree: deletion, B-tree file org.	
WK 11	5/25 Mon	0:57:23		v 05 20:48 v 06 27:55 v 07 08:40	Static hashing Dynamic hashing - extendable hashing Ordered index vs hash, other issues	
	5/27 Wed	0:46:41	Chap 12	v 01 20:53 v 02 13:27 v 03 12:21	Query processing, query plan, cost measures Selection operations External sort merge	
WK 12	6/1 Mon	0:50:12		v 04 17:25 v 05 11:13 v 06 21:34	Nested Loop Join Hash Join Materialization vs pipelining, cost of expressions	
	6/3 Wed	0:51:45	Chap 14	v 01 31:10 v 02 20:35	Transactions, ACID Transaction states, schedules	1-3 Due
WK 13	6/8 Mon	0:56:36		v 03 29:08 Chap 15 v 01 27:28	Serializability, recoverable/cascadeless sched. Concurrency control, 2PL, strict/rigorous 2PL	Proj 2
	6/10 Wed				Final Exam	
WK 14	6/15 Mon				Moved to 5/23	
WK 15		1:11:54	Chap 16	v 01 17:27 v 02 21:36 v 03 32:51	Atomicity & durability, data access Log-based recovery, undo & redo, checkpoint Transaction rollback, recovery with concurrent transaction, WAL	Due 6/22