

CS240 Database Management

Spring 2018 Syllabus / MWF D309 - SB 13:00:03-13:49:57 - SA 14:00:03-14:49:57

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Wk	Day	Date	Topics & Pages from textbook: Kroenke & Auer (2014). Database Processing, 13th edition	Deadlines	
1	Mon	22-Jan	Introduction to the course	EXAMS FOR COURSE INTRO & CH 1 CLOSE AT 23:55 ON SUN 4 FEB	
	Wed	24-Jan	Ch 1: Introduction – Database basics - pp 2-16		
	Fri	26-Jan	Ch 1: Introduction – DB design & processing - pp 17-32		
2	Mon	29-Jan	Ch 2: Intro to SQL – Cape Codd Outdoor Sports & the SELECT/FROM/WHERE framework - pp 33-44		
	Wed	31-Jan	Ch 2: Intro to SQL – Submitting SQL statements to the DBMS – pp 45-65		
	Fri	2-Feb	Ch 2: Intro to SQL - Calculations in SQL queries, grouping, JOINS – pp 70-117		
3	Mon	5-Feb	Ch 3: Relational Model & Normalization – Terminology – pp 118-130		EXAMS FOR CH 2 CLOSE AT 23:55 ON SUN 11 FEB
	Wed	7-Feb	Ch 3: Relational Model & Normalization – Normal forms – pp 131-136		
	Fri	9-Feb	Ch 3: Relational Model & Normalization – Eliminating anomalies, 5th NF, D/K NF – pp 137-159		
4	Mon	12-Feb	Ch 4: DB Design Using Normalization – Table structure, designing updatable DBs – pp 160-164		EXAMS FOR CH 3 CLOSE AT 23:55 ON SUN 18 FEB
	Wed	14-Feb	Ch 4: DB Design Using Normalization – Designing read-only DBs – pp 165-167		
	Fri	16-Feb	Ch 4: DB Design Using Normalization – Common design problems – pp 167-178		
5	Mon	19-Feb	Ch 5: Data Modeling with the Entity-Relationship Model – The model – pp 179-192		EXAMS FOR CH 4 CLOSE AT 23:55 ON SUN 25 FEB
	Wed	21-Feb	Ch 5: Data Modeling with the E-R Model – Patterns in forms, reports & E-R models – pp 193-208		
	Fri	23-Feb	Ch 5: Data Modeling with the E-R Model - The data modeling process – pp 209-229		
6	Mon	26-Feb	Ch 6: Transforming Data Models into DB Designs – Purpose, create a table for each entity – pp 230-236	EXAMS FOR CH 5 CLOSE AT 23:55 ON SUN 4 MAR	
	Wed	28-Feb	Ch 6: Transforming Data Models into DB Designs – Create relationships – pp 236-252		
	Fri	2-Mar	Ch 6: Transforming Data Models into DB Designs – Design for minimum cardinality – pp 253-261		
7	Mon	5-Mar	Ch 6: Transforming Data Models into DB Designs – View Ridge Gallery DB – pp 261-277	EXAMS FOR CH 6 CLOSE AT 23:55 ON SUN 11 MAR	
	Wed	7-Mar	Ch 7: SQL for DB Construction & Application Processing – Managing table structures with SQL DDL – pp 278-299		
	Fri	9-Mar	Ch 7: SQL for DB Construction & Application Processing – SQL DML Statements – pp 300-309		
----- 12-16 MAR: MID-SEMESTER BREAK -----				MID-TERM EXAMS CLOSE AT 23:55 ON ***FRIDAY*** 16 MAR	
8	Mon	19-Mar	Ch 7: SQL for DB Construction & Application Processing – Using SQL views – pp 309-318	EXAMS FOR CH 7 CLOSE AT 23:55 ON SUN 1 APR	
	Wed	21-Mar	Ch 7: SQL for DB Construction & Application Processing – Embedding SQL in program code – pp 319-365		
	Fri	23-Mar	Ch 8: DB Redesign – SQL statements for checking functional dependencies, analyzing an existing DB – pp 366-375		
9	Mon	26-Mar	Ch 8: DB Redesign – Changing table names & columns – pp 376-379	EXAMS FOR CH 8 CLOSE AT 23:55 ON SUN 8 APR	
	Wed	28-Mar	Ch 8: DB Redesign – Changing relationship cardinalities – p 379-383		
	Fri	30-Mar	Ch 8: DB Redesign – Adding and deleting tables & relationships, forward engineering – pp 384-393		
10	Mon	2-Apr	Ch 9: Managing Multiuser DBs – DB administration, concurrency control – pp 394-403	EXAMS FOR CH 9 CLOSE AT 23:55 ON SUN 15 APR	
	Wed	4-Apr	Ch 9: Managing Multiuser DBs – SQL transaction-control language & declaring lock characteristics – pp 404-409		
	Fri	6-Apr	Ch 9: Managing Multiuser DBs – DB security – pp 410-414		
11	Mon	9-Apr	Ch 9: Managing Multiuser DBs – DB backup & recovery, managing the DBMS – pp 415-427	EXAMS FOR CH 10 CLOSE AT 23:55 ON SUN 22 APR	
	Wed	11-Apr	Ch 10: Managing DBs with SQL Server 2012, Oracle 11g rel 2, & MySQL 5.6 – pp 428-434		
	Fri	13-Apr	Ch 11: The Web Server Environment – View Ridge Gallery, Web DB processing environment, ODBC Standard – pp 435-447		
12	Mon	16-Apr	Ch 11: The Web Server Environment – MS .NET Framework & ADO.NET, Java platform – pp 448-460	EXAMS FOR CH 11 CLOSE AT 23:55 ON SUN 29 APR	
	Wed	18-Apr	Ch 11: The Web Server Environment – Web DB processing with PHP – pp 461-485		
	Fri	20-Apr	Ch 11: The Web Server Environment – XML markup, schema – pp 486-500		
13	Mon	23-Apr	Ch 11: The Web Server Environment - XML from DB data – pp 501-533	EXAMS FOR CH 12 CLOSE AT 23:55 ON SUN 6 MAY	
	Wed	25-Apr	Ch 12: Big Data, Data Warehouses, & Business Intelligence – Business intelligence systems, reporting, data mining – pp 534-549		
	Fri	27-Apr	Ch 12: Big Data, Data Warehouses, & Business Intelligence – Reporting systems, distributed DB processing, object-relational DBs – pp 550-563		
	Mon	30-Apr	Ch 12: Big Data, Data Warehouses, & Business Intelligence – Virtualization, cloud computing, git data & Not Only SQL movement – pp 564-579	Complete projects & present in class	
	Wed	2-May			
	Fri	4-May			
FINAL EXAM DEADLINE TBD -- SET BY REGISTRAR					