INFO90002 S1 2021 – Text Book Reference

Week	Lecture 1	Lecture 2	Ramakrishnan and Gehrke 'Database Management Systems' 3rd Edition	Hoffer, Prescott & Topi 'Modern Database Management' 9th Edition
Week 1 1 March	**1. Subject Administration**	**2. Introduction to Databases and the database lifecycle**	Chapter 1 Overview of Database Systems 1.1 Managing Data 1.2 A Historical Perspective 1.3 File systems versus a DBMS 1.4 Advantages of a DBMS 1.5 Describing and Storing Data in a DBMS	Chapter 1 The Database Environment Chapter 2 The Database Development Process
Week 2 8 March	**3.Conceptual Modelling**	**4. Logical & Physical Modelling**	Chapter 2 Introduction to Database Design	Ch 5 Logical Database Design and the Relational Model Ch 6 Physical Database Design and the Relational Model
Week 3 15 March	**5. ER Modelling and data types**	**6. Normalisation**	Chapter 3 The Relational Model	Ch 5 (subsection on Normalisation – insufficient detail)
Week 4 22 March	**7. ER Modelling - LIVE!**	**8. SQL 1 Overview DML**	Chapter 5 SQL: Queries, Constraints, Triggers 5.2 The Form of a Basic SQL Query 5.4, Nested Queries	Ch 7 'Introduction to SQL'
Week 5 29 March	**9. SQL 2 Overview DDL DML JOINS FUNCTIONS**	**10. SQL 3**	Chapter 5 SQL: Queries, Constraints, Triggers 5.3 UNION INTERSECT and EXCEPT 5.5.1 The GROUP BY and HAVING clauses 5.6 NULL Values 12.1 The System Catalog	Ch 8 'Advanced SQL'
5 April	**NO CLASS**	**NO CLASS**	**MID SEMESTER BREAK**	
Week 6 12 April	**11.Apps & Web Apps**	**12. Quiz No 1 (10%)**	No equivalent	Ch 9 'The Client/Server Database Environment' Ch 10 'The Internet Database Environment'
Week 7 19 April	**13. Transactions Concurrency & Locking**	**14. Storage & Indexing**	Chapter 16 16.1 The ACID properties 16.2 Transactions and Schedules 16.3 Concurrent execution of Transactions 16.4 Lock-Based Concurrency Control 16.6 Transaction Support in SQL Chapter 17. Concurrency Control 17.1 View Serializability	Chapter 13 'Controlling Concurrent Access'

			17.2 Introduction to Lock Management 17.6 Concurrency control without Locking	
Week 8 26 April	**15. Administration & Architecture**	**16. Distributed Databases**	Chapter 22 22.1 22.6 22.7 (Distributed)	Ch 13 Data and Database Administration *up to* 'The Open Source Movement' Ch 14 Overview: Distributed Databases *up to* 'Evolution of Distributed DBMS'
Week 9 3 May	**17. Quiz No 2 (SQL)**	**18.Quiz No 2 (SQL) 10%**		
Week 10 10 May	**19. Data Warehouse**	**20. Security & Ethics**	Chapter 25 25.1 25.2 25.6 25.7 25.8	Ch 11 Data Warehousing (up to 'The Derived Data Layer') Ch 13 'Managing Data Security' 'Database Backup and Recovery'
Week 11 17 May	**21. NoSQL**	**22. Assignment 1 Feedback**		
Week 12 24 May	**23. Quiz No 3 (10%)**	**24. Subject Review and Exam Prep**		