

COSC344 Course Outline

Lecture number	Lecture topic	Week number	Lab topic
1	Introduction to databases, models	1	No Lab
2	Database design, ER modelling		
3	Relational model, relational algebra & operators 1	2	Introduction to Oracle
4	Relational algebra & operators 2		
5	SQL - DDL	3	Loading data into Oracle
6	SQL - DML 1		
7	SQL - DML 2	4	SQL 1
8	Functional dependencies		
9	Normalisation	5	SQL 2
10	PL/SQL		
11	Triggers	6	SQL 3
12	Java & SQL		
13	C & SQL	7	PL/SQL and Triggers
14	PHP & SQL		
15	Views & NULL	8	Java & SQL 1; C & SQL 1; PHP & SQL 1
16	DBMS Architecture & System catalog		
17	Database files and storage	9	Java & SQL 2; C & SQL 2; PHP & SQL 2
18	Database indexing - part 1		
19	Database indexing - part 2	10	No Lab
20	Database security & auditing		
21	Transactions	11	Oracle system catalogs & indexes
22	Concurrency control		
23	Database recovery	12	Security & integrity
24	Query optimisation		
25	Non-relational data models	13	No Lab
26	Revision		