Week 1

Lecture 1 – 03/01/2018
- Introduction to the course
- Evaluation Guidelines

Lecture 2 – 04/01/2018
- Introduction to database systems

Week 2

Lecture 3 – 10/01/2018
- Introduction to database systems

Lecture 4 – 11/01/2018
- Introduction to database systems
- ER Diagram
- Generating tables from ER diagram

Lectures 5+6 – 12/01/2018
- Generating tables from ER diagram
- ER model design issues

Week 3

Lecture 7 – 17/01/2018
- Extended ER features
- Alternative notations

Lecture 8 – 18/01/2018
- Relational model
- Relational Algebra
- Basic SQL
Lectures 9 – 19/01/2018

- Basic SQL
- DDL
- Basic SQL query structure
- Additional basic operations like join

Week 4

Lecture 10 – 24/01/2018

- Basic SQL
- Aggregate functions
- Nested Subqueries
- Insert, Delete, Update

Lecture 11 – 25/01/2018

- Intermediate SQL
- Outer joins
- Views

Week 5

Lecture 10 – 31/01/2018

- Intermediate SQL
- Constraints
- Check, Not null, Referential integrity
- Data types
- Authorization

Lecture 11 – 01/02/2018

- Authorization
- Advanced SQL
- Functions and procedures
- Triggers

Lecture 12 – 02/02/2018

- Triggers
- Recursive queries
- Relational algebra extensions
Week 6

Lecture 13 – 07/02/2018

- Tuple relational calculus
- Domain relational calculus

Lecture 11 – 08/02/2018

- Database design
- Functional dependency
- Decomposition
- BCNF

Lecture 12 – 09/02/2018

- Dependency preserving decomposition
- 3NF
- Closure of F
- Closure of attribute