

Database Concepts

Database Concepts : DB01

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Course Outline

- Duration – 1 Semester (12 Weeks)
- Credits - 5
- Lectures – 2 hours per week
- Practical – 2 hours per week
- Directed learning – 12 hours
- Independent learning – 40 hours

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Course Material

- Course material will be made available on X:\ drive
(X:\Lab\C WOODS\DBConcepts_CP\...)
- Supplement course material with reading from recommended texts and/or Internet

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Course Content

- **Databases and Database Users**
- **History of Databases**
 - Paper-based systems
 - File-based systems
 - Relational database systems
- **Data Models**
 - Network / Hierarchical / Relational
- **The relational Data Model**

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- **Database Programming**
 - SQL
 - Interactive Vs. Embedded SQL
- **Database Concepts & Architectures**
 - Database Architectures
 - Data and Structural Independence
- **Database Design**
 - ER Modelling
 - Relational Schema / Database Schema
 - Normalisation

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- **DBMS Functions**
- **Database Administration**

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Reading Material

- **Database Systems**
Rob, Coronel, Crockett
- **Introduction to Database Systems**
C.J. Date
- **Database Management Systems**
Cengage Learning– Fasttrack series

Other Material

- Useful web links will be provided
- Google! There is lots of useful material on the web

Assessments

Continuous Assessment (CA) – 50%

- Written Assessment 10%
 - SQL
- Out of class assignment 20%
 - Data Modelling/Relational Schema
 - Normalisation
 - Database Schema
- Lab Assignment 20%
 - Oracle
 - Scripting

Assessment Dates

Assignment	Date
Assignment 01: In class	Monday 20 th October 2014
Assignment 02: Out of class	Sunday 23 rd November 2014
Assignment 03: Lab Assessment	Week beginning 1 st December 2014

CA – Absence/Late Submissions

- Penalties apply - 20% deduction for each day late (week day).
- Medical certification, if applicable, **must** be submitted within one week in case of late submission

Final Examination (FE) – 50%

- 2 hour examination
- Paper contains 4 questions
- Answer any three questions
- All questions carry equal marks

Important!

- Module pass rate: 40%
- Students **must** achieve 25% in Final Examination regardless of CA mark.