

Course Outline 2009
INFORM 713: INFORMATION SYSTEMS TECHNOLOGY
(20 POINTS)

Course Prescription

Introduces the business application of computer technologies via the use of existing MS Access database. Data modelling and database design are taught in conjunction with hands-on exercises in querying and reporting. The role of business information system requirements in the development and/or purchase of software is explored.

Programme and Course Advice

See the course instructor or the Programme coordinator, Omar Fahmy.

Goals of the Course

- To provide students with an introduction to information systems technology, data modelling, relational theory, database design, understanding of database architectures and data warehousing.
- To design and develop a database to store required data so that:
 - Information may be obtained with speed & accuracy
 - Security and confidentiality of data is ensured
 - Changes to the database are facilitated.

Learning Outcomes

By the end of this course it is expected that the student will be able to:

1. describe relational database characteristics;
2. design and evaluate a relational database;
3. implement a database;
4. evaluate database deployment architectures; and
5. analyse why and how data warehouses are used.

Content Outline

Introduction to the Database Environment
The Database Development Process
Database Modelling
Advanced Database Modelling
Normalization
SQL
Client Server & Transaction Management
Test
Data & Database Administration: Security
Data Warehousing & Exam Review

Learning and Teaching

Lectures: 3 hours per week, the course will be delivered in 10 weekly lectures at the City Campus. Please refer to the timetable on the website for date & times for your class and will have a short break at the mid point. The expectation is that students spend an average of 12-15 hours per week on the course outside of class

approximately evenly split between reading/studying and practical / theory assignments).

A variety of instructional methods will include lectures and case discussions. The course content will present both contemporary research (primarily from database articles) and practice. Thorough student support is provided through office hours.

Teaching Staff

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Learning Resources

Required text: Hoffer, J. A., Prescott, M. B. and McFadden, F.R. (2006) *Modern Database Management* (8th Ed.). Prentice Hall

Assessment

Assignment 1	5%
Assignment 2	6%
Assignment 3	7%
Assignment 4	7%
Test	15%
Exam: Open Book	60%

Learning Outcome	Assignment 1	Assignment 2	Assignment 3	Assignment 4	Test	Exam
1	x	x	x	x	x	x
2		x	x	x	x	x
3			x	x	x	x
4					x	x
5						x