THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

BUSINESS SCHOOL

Course Outline 2017
INFOSYS 222: DATABASE SYSTEMS (15 POINTS)

Semester 2 (1175)

Course Prescription

Managers and other knowledge workers find that many of their duties revolve around accessing, organising, and presenting organisational and external information. The ability to develop and use computer databases is becoming a critical skill that is required in many disciplines. These skills are developed through an introduction to data modelling, relational theory, database design, and the management of databases

Programme and Course Advice

Prerequisite: INFOSYS 110 or 120, or COMPSCI 105 or 107
Restriction: IMFOMGMT 292

Goals of the Course

This course aims to develop the fundamental skills of designing and developing a relational database. All assessments require student to demonstrate their mastery of the practical aspects of the course including data modelling and structured query language (SQL)

Learning Outcomes

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

1. Understand the fundamental concepts of relational database;
2. Design a relational database;
3. Implement a relational database;
4. Define and manage data from a relational database;
5. Understand transaction management in a relational database; and
6. Understand the fundamental concepts of a data warehouse

Content Outline

Week	Content
01	Introduction
02	Relational model
03	ER modelling
04	Data modelling
05	Data modelling
06	Normalisation
07	SQL
08	SQL

09	SQL
10	DBMS fundamentals
11	Data warehouse
12	Review

Learning and Teaching

Student must attend three 1-hour lectures and one 1.5-hour lab per week. In addition, student should be prepared to spend about another six hours per week on activities related to this course. These activities include reading, practicing, and preparing for assessments

Teaching Staff

Lecturer
Johnny Chan | jh.chan@auckland.ac.nz

Coordinator
Udayangi Muthupoltotage | u.muthupoltotage@auckland.ac.nz

Learning Resources

- Greenspun. (1998) SQL for Web Nerds. philip.greenspun.com/sql
- Allen and Owens. (2010) *The Definitive Guide to SQLite.* New York: Apress. Available from the library

Assessment

The detail of each assessment will be provided as the course proceeds

Assessment	Weighting	Learning Outcome
Assignment 01	15%	1-2
Assignment 02	15%	3-4
Test	20%	1-4
Exam	50%	1-6

This course requires student to pass both the internal and external exam

Inclusive Learning

Student should discuss privately any impairment-related requirements face-to-face and/or in writing with the coordinator

Student Feedback

Student will be asked to complete course and teaching evaluations at certain point of the course