Business and Economics

INFOSYS 222 : Database Systems (15 POINTS)

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.

Course Overview

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

Course Requirements

Prerequisite: 15 points from COMPSCI 101, 105, 107, 130, INFOSYS 110

Capabilities Developed in this Course

Capability 1:   Disciplinary Knowledge and Practice
Capability 2:   Critical Thinking
Capability 3:   Solution Seeking

Graduate Profile: Bachelor of Commerce

Learning Outcomes

By the end of this course, students will be able to:

1. Describe the fundamental concepts of relational database (Capability 1)
2. Analyse existing data requirements and accurately design a relational database (Capability 1 and 2)
3. Accurately develop a relational database based on an existing database design (Capability 1 and 3)
4. Define and accurately manage data from a relational database (Capability 1, 2 and 3)
5. Describe and discuss transaction management in a relational database (Capability 1)

6. Describe and apply the fundamental concepts of a data warehouse (Capability 1 and 2)

Assessments

Assessment Type	Percentage	Classification
Quizzes	10%	Individual Coursework
Assignments	30%	Individual Coursework
Test	20%	Individual Test
Final Exam	40%	Individual Examination
4 types	100%	

Assessment Type	Learning Outcome Addressed					
	1	2	3	4	5	6
Quizzes	✔	✔	✔	✔	✔	✔
Assignments	✔	✔	✔	✔		
Test	✔	✔				
Final Exam			✔	✔	✔	✔

This course requires student to pass both the internal (i.e. coursework and test combined) and the exam separately

Workload Expectations

Student must attend TWO, 3-hour lectures (from Week 1 to Week 6) and TWO, 2-hour labs per week. In addition, student should be prepared to spend ten hours per week on activities related to this course. These activities include reading, practicing, and working on the assessments.

Delivery Mode

Campus Experience

Attendance is required at scheduled activities including labs to complete components of the course.
Lectures will be available as recordings.
Attendance on campus is required for the test and exam.
The activities for the course are scheduled as a standard weekly timetable.

Learning Resources

All course readings are available via Reading Lists.

Student Feedback

At the end of every semester students will be invited to give feedback on the course and teaching through a tool called SET or Qualtrics. The lecturers and course co-ordinators will consider all feedback and respond with summaries and actions.

Your feedback helps teachers to improve the course and its delivery for future students.

Class Representatives in each class can take feedback to the department and faculty staff-student consultative committees.

Digital Resources

Course materials are made available in a learning and collaboration tool called Canvas which also includes reading lists and lecture recordings (where available).

Please remember that the recording of any class on a personal device requires the permission of the instructor.

Academic Integrity

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms.

Inclusive Learning

All students are asked to discuss any impairment related requirements privately, face to face and/or in written form with the course coordinator, lecturer or tutor.

Student Disability Services also provides support for students with a wide range of impairments, both visible and invisible, to succeed and excel at the University. For more information and contact details, please visit the Student Disability Services' website http://disability.auckland.ac.nz

Special Circumstances

If your ability to complete assessed coursework is affected by illness or other personal circumstances outside of your control, contact a member of teaching staff as soon as possible before the assessment is due.

If your personal circumstances significantly affect your performance, or preparation, for an exam or eligible written test, refer to the University's aegrotat or compassionate consideration page https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html.

This should be done as soon as possible and no later than seven days after the affected test or exam date.

Learning Continuity

In the event of an unexpected disruption we undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions the University has contingency plans to ensure that access to your course continues and your assessment is fair, and not compromised. Some adjustments may need to be made in emergencies. You will be kept fully informed by your course co-ordinator, and if disruption occurs you should refer to the University Website for information about how to proceed.

Student Charter and Responsibilities

The Student Charter assumes and acknowledges that students are active participants in the learning process and that they have responsibilities to the institution and the international community of scholars. The University expects that students will act at all times in a way that demonstrates respect for the rights of other students and staff so that the learning environment is both safe and productive. For further information visit Student Charter https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html.

Disclaimer

Elements of this outline may be subject to change. The latest information about the course will be available for enrolled students in Canvas.

In this course you may be asked to submit your coursework assessments digitally. The University reserves the right to conduct scheduled tests and examinations for this course online or through the use of computers or other electronic devices. Where tests or examinations are conducted online remote invigilation arrangements may be used. The final decision on the completion mode for a test or examination, and remote invigilation arrangements where applicable, will be advised to students at least 10 days prior to the scheduled date of the assessment, or in the case of an examination when the examination timetable is published.