

Relational Databases

Australian National University
Department of Computer Science
Comp2400/Comp6240
Semester Two, 2007

General Course Information

Outline

This course aims to provide an understanding of relational databases. The central topics are the relational data model, and SQL. This will include a little of the underlying mathematics and notions of integrity, constraints and normalisation. We will also learn conceptual modelling for database design and DBMS techniques for performance, security and recoverability.

People

The lecturer is Greg O'Keefe greg.okeefe@anu.edu.au.
The course tutor is Robin Garner robin.garner@anu.edu.au.
We also have Kunnal Khiatani u4341119@anu.edu.au
and Linda Buisman linda.buisman@rsise.anu.edu.au as tutors.

Information Sources

The course website is at

<http://cs.anu.edu.au/students/comp2400>

All the lecture notes, lab worksheets, handouts, news and announcements will be made available there.

The Student Registration and Marks System, StReaMS

<http://cs.anu.edu.au/streams>

contains a student discussion forum, which some of the teaching staff will monitor and post to. StReaMS is also used for students to enrol themselves in lab groups.

The course text is

Fundamentals of Database Systems
5th edition, Elmasri and Navathe
Addison-Wesley, 2007

Students are strongly encouraged to obtain a copy. Readings will be specified from the book, and this material will be assessable even if not explicitly covered in the lectures. Earlier editions are fine, with the minor inconvenience of adjusting references.

The open source relational DBMS PostgreSQL will be used in the labs. The PostgreSQL documentation is recommended for additional reading, and includes an excellent SQL reference. It is available on the labs page of the course web-site.

<http://cs.anu.edu.au/students/comp2400/labs>

The documentation is also available, along with the PostgreSQL software and other resources from the PostgreSQL web-site.

<http://www.postgresql.org>

Activities

There are three 50 minute lectures each week, except when those weeks contain holidays or university-wide festivities such as bush-week. Lectures will usually conclude with an exercise or question which will be considered in the following lecture. There will also be assigned readings from the course text. The weekly lecture schedule is as follows:

Tuesday	10am	Manning-Clarke Theatre 2
Thursday	9am	Chemistry Theatre 1
Friday	10am	Physics Theatre

Recordings and transparencies will be made available on the course web-site, but students should attend the lectures whenever they can.

There will be 6 two hour lab sessions. These will be held in DCS room N113 in the even weeks of semester. Each student must join one of the small groups using StReaMS

<http://cs.anu.edu.au/streams>.

The lab worksheets will be made available on the course web-site.

Assessment

The assessment consists of the following components

10%	lab exercises	Tutors will assess attendance and exercise progress in the labs.
20%	assignments	Two assignments counting for 10% each.
20%	mid-semester exam	A 50 minute test in the lecture period of Friday 31 August.
50%	final exam	The exam will cover the whole course content, including assigned readings.

Final marks may be a scaled version of the sum of these components.

Assignments will only be accepted after the due date if there is written evidence of a serious and unforeseeable situation that prevented it from being completed. Do not leave the assignments until the last minute.

Manage Your Own Learning

The laboratory exercises, and the exercises suggested at the end of lectures provide an opportunity to assess your understanding of the course material. The assignments and mid-semester exam will also provide valuable feedback.

If you do not understand something, then do something about it. Here are some suggestions. Reread the relevant lecture notes or sections of the text. Find alternative sources in the library or on the internet. Ask your class-mates. Post a message on the discussion forum. Talk to the lecturer (Greg), or your tutor. We are here to help you learn.