



The University of New South Wales
School of Information Systems, Technology and Management

INFS1603 Business Data Management

Course Outline - Session 1, 2005

1. COURSE OVERVIEW

This course provides an introduction to the concepts, design techniques and technology for the storage and management of data.

2. COURSE OBJECTIVES

Students gain knowledge and practical skills to model data including:

- the use of entity/relationship models and object models
- the design of simple databases in an organisational environment
- an understanding of the role of data in business
- an understanding of quality assurance issues in collecting, storing and using data

Students acquire and exercise skills in a number of data modelling and design techniques as well as develop a simple system using Microsoft Access.

On successful completion of this course, students should be able to:

- demonstrate an understanding of database design
- interpret an organizational scenario and solve a set of given business rules
- explain the role of data in business, including the quality issues involved
- develop some skills in developing a working database using Microsoft Access
- demonstrate ability to work in teams, including the ability to report effectively, orally and in written form

3. STAFF

		Office:	Consultations:
Lecturer in charge:	Lesley Land (Lecturer-in-charge)	QUAD2114 02 9385 4738	Mon 9-10, Tue 2-3
Co-Lecturer:	Aybüke Aurum (Co-lecturer)	QUAD2072 02 9385 4418	Mon 3-4

WebCT will be utilised for all course communications i.e. notices, questions regarding assignments and course content. E-mails received outside of WebCT will not be read or answered. PLEASE NOTE – only urgent (and very short) enquiries will be answered via e-mail. Please attend consultation times or make an appointment if you need to discuss issues in detail.

Email contacts and usage

Students should note that it is school policy to only respond to email messages that are clearly identifiable as having originated from legitimate accounts. Legitimate email accounts are:

- A UNSW student account
- An identifiable employer provided account
- An identifiable ISP account (bigpond, ozemail, etc)

4. TEACHING AND LEARNING APPROACHES

4.1. COURSE STRUCTURE

The formal teaching component of this course consists of:

Lectures (2 hours per week)

These are given twice weekly. Attendance at one stream only is needed. Reading from the textbook are set for each week. Students are strongly advised to read these before each lecture.

Tutorials (1 hour per week)

Tutorials are designed to give you feedback on your progress during the course. Substantial portions of the course gradually build fairly complex concepts over a number of weeks. While your tutor is a key person to assist you with understanding the course material, your learning will depend on your regular consistent working through the problems set week by week.

Each week you will need to attend a one-hour tutorial during which you will work through exercises related to the previous week's lectures, and discuss other matters related to the course. All exercises will be collected and two of these (chosen at the discretion of staff) will be contribute to the tutorial assessment mark.

Tutorial exercises will be set for each tutorial (see the course website). Students should prepare written answers for each tutorial, make sure you prepare 2 copies for each tutorial, 1 to hand in, and another for discussion. These will be collected every week starting Week 2. Over the session three or four of these exercises will be selected at random by the tutor and the two best exercises of this selection will make up your tutorial assessment mark. Late submissions cannot be accepted.

Enrolling in Tutorials

Please note the following carefully:

- Register for a tutorial using the Tutorial Allocation System (TAS) by the end of Week 1. Access from the Faculty homepage: <http://www.fce.unsw.edu.au>
- Tutorial times can be changed until the end of Week 1, if there are vacancies.
- In Week 2, attend the tutorial in which you enrolled. Failure to attend may result in your place being allocated to another student.
- To change tutorials in week 2 and later requires the permission of the Lecturer-in-charge, and only will be given in very exceptional circumstances.

Supervised lab sessions

Students will need to become familiar with a range of personal computer software, including Microsoft Access. The Quad labs are available for students to do this on a self-taught basis, using the recommended workbooks or equivalent alternatives. For part of the Session a weekly lab will be booked for students to use.

Consultations:

In addition to face-to-face teaching sessions, each lecturer will have specific consultation times (to-be announced on the course web site). You should contact your lecturer during their consultation times, or arrange an appointment at mutually suitable time. Don't rely on a lecturer being available outside consultation times without making prior arrangements.

Your time commitment:

A university course represents a commitment of 9 to 10 hours of work per week. A full time job is, on average, 35-40 hours per week while full time university study is normally four courses. Based on that assumption 1 course is 35-40 hours divided by 4 = 9 to 10 hours per week. The formal teaching component in INFS1603 is 2 hours therefore you will be required to commit additional 7-

8h per week (for reading, working on your assignment, preparation for lectures and tutorials, lab work etc.)”

4.2. *Lecture, Tutorial/Laboratory Schedule*

Subject to change. Changes will be notified through the course website.

Wk	Week begins	Reading	Lecture Topics	Tutorial
1	28 Feb	Chap. 1	Introduction to databases	No tutorial
2	7 Mar	Chap. 2, 3	Data models & E-R modelling (Part 1)	Tute-1: Thinking about databases
3	14 Mar	Chap. 4	E-R modelling (Part 2)	Tute-2: E-R
4	21 Mar	Chap. 3	Relational modeling	Tute-3: E-R
Session break from Friday 25/3/05 to Sunday 3/4/05				
5	4 Apr	Chap 5	Normalization	Tute-4: E-R
6	11 Apr	Chap 5	Normalization	Tute-5: Normalization Pt 1 assignment due Thursday 14 April, noon
7	18 Apr	Chap. 8, 15	The database development process & data administration	Tute-6: Normalization
8	26 Apr ¹		No lectures. Tutes as usual.	Tute-9: SQL
9	2 May	Chap 6	SQL	Tute-7: Normalization
10	9 May	Chap 7	SQL	Tute 8: SQL exercise (in lab)
11	16 May	Chap 11 + other	Object-oriented modelling	Tute-10: SQL Pt 2 & 3 assignment due Thurs 19 May, noon.
12	23 May	Chap 11 + other	Object-oriented modelling	Pt 4 assignment: Group presentations (in lab)
13	30 May	Chaps 12-14	Database trends & emerging techniques	Pt 4 assignment: Group presentations (in lab)
14	6 Jun		Course review	Tute 11: SQL & OO review

¹ 25 April 2005 - public holiday
page 3

STUDENT RESOURCES

4.3. *Course Web Site*

This course has a web site for notices, handouts, references and other useful information. It is suggested that you consult the web site at least once a week. The address of the web site is at:

<http://webct.edtec.unsw.edu.au/webct/public/home.pl>

You will need your student number and your unipass to gain access to this page. Access is only available to students enrolled in this course.

Included on the Course Web Site will be:

- Lecture slides (PowerPoint)
- List of consultation times
- Notices
- Lots of other useful information, etc.

You **must** visit this site regularly for updates and important notices (at least twice per week).

4.4. *Texts*

Textbooks

The major textbook for this course covers most of the material on database modelling, relational theory and design:

- Rob, P. & Coronel, C. Database Systems: Design, Implementation, and Management. Published by Thomas Course Technology, 6th edition, 2004. ISBN: 0-619-21372-8.

References

For the project assignment you will need to learn and use Microsoft Access 2003, running on Windows XP in the Quad labs. Several workbooks are available that provide adequate coverage. For instance, use one of the following:

- Shelly, G.B., Cashman, et al. Microsoft Office Access 2003: Complete Concepts and Techniques. Thompson Learning, 2004. ISBN: 0-619-20039-1 [but not the Introductory Concepts ...]
- Adamski J.J., Finnegan, K.T. New Perspectives on Microsoft Office Access 2003: Introductory. Thompson Learning, 2004. ISBN: 0-619-20671-3.

5. ASSESSMENT

Component:	Percentage	Due date	Method of assessment
Assignment	30 %	Week 6, Wed 13 April (10%) Week 11, Thurs 19 May (20%)	Reports Reports, presentation
Tutorial work	10 %	Throughout session	Tutorial solutions, attendance and participation
Final exam	60 %	Exam period	Written exam

6. Criteria to Pass the Course

To receive a passing grade in this course, you must meet ALL of the following criteria:

- Attend at least **80 %** of all scheduled classes (lectures and tutorials)
- Attain a satisfactory mark in each assessment component (a mark of at least **45%** is normally regarded as satisfactory for an assessment component).
- Attain a mark of at least **45%** in your final exam: and
- Attain an overall mark of at least **50%**.

7. Assignment Extensions and Late Penalties

Late submission of assignments and tutorial work will incur a penalty of **10% of the maximum assessment mark per day** (including weekends and public holidays). An extension in the time of submission will only be granted under exceptional circumstances by the lecturer-in-charge. Work commitments are not considered to be sufficient grounds for an assignment extension. In all cases, documented evidence must be provided.

8. STUDENT SUPPORT AND ASSISTANCE

8.1. *Your Lecturers*

If you experience a problem in the course (due to the course materials or assignments, health or any other reason) which is likely to interrupt your attendance in class or delay submission of assignments then please contact the lecturer-in-charge or one of the co-lecturers. Your lecturer should be always the first point of contact. Please do contact staff as soon as any problem arises, as we may be able to help and save a lot of anxiety on your part.

8.2. *Education Development Unit*

Additional learning support, tailored to the needs of FCE students, is available from the Education Development Unit (EDU) in the Faculty. The EDU offers a range of services for FCE students including:

- o Academic skills workshops run throughout the session;
- o Printed and on-line study skills resources e.g. referencing guide, report writing and exam preparation;
- o A drop-in resource centre containing books and audio visual material that can be borrowed;
- o A limited consultation service for students with individual or small group learning needs.

More information about the EDU services including on-line resources, workshop details and consultation request forms are available from the EDU website.

Contacts and location:

EDU Web: <http://education.fce.unsw.edu.au>

EDU Location: Room 2039, Level 2 Quadrangle Building

EDU services are free and confidential and are available to students of the Faculty of Commerce and Economics.

Other UNSW support

In addition to the EDU services, the UNSW Learning Centre provides academic skills support services for students. The Learning Centre is located on Level 2 of the Library and can be contacted by Phone: 9385 3890 or through their website: <http://www.lc.unsw.edu.au/>. Students experiencing problems of an academic or personal nature are encouraged to contact the Counselling Service at UNSW. This service is free and confidential and run by professional counsellors. The Counselling Service is located on Level 2, Quadrangle East Wing, and can be contact on 9385 5418.

9. ADMINISTRATIVE RULES AND REGULATIONS

9.1. *Academic Misconduct*

Students are reminded that the University regards academic misconduct as a very serious matter. Students found guilty of academic misconduct are usually excluded from the University for 2 years. Because of the circumstances in individual cases the period of exclusion can range from one session to permanent exclusion from the University. The following are some of the actions which have resulted in students being found guilty of academic misconduct in recent years:

1. submitting work for assessment knowing it to be the work of another person;
2. failing to acknowledge the source of material in an assignment;
3. improperly obtaining prior knowledge of an examination paper and using that knowledge in the examination;
4. taking unauthorised materials into an examination.

9.2. *Plagiarism*

Plagiarism entails taking and using as one's own, the thoughts or writings of another without acknowledgement including:

- (a) where paragraphs, sentences, a single sentence or significant part of a sentence which are copied directly, are not enclosed in quotation marks and appropriately footnoted;
- (b) where direct quotations are not used, but ideas or arguments are paraphrased or summarised, and the source of the material is not acknowledged either by footnoting or other reference within the text of the paper; and
- (c) where an idea, which appears elsewhere in print, film or electronic medium, is used or developed without reference being made to the author or the source of the idea.

Student discussion and comparison of the ideas and concepts raised in this course is encouraged. However, students may not submit the work of anyone else in an assignment unless full credit for the source is given. Use of another person's work from any source without proper acknowledgment is considered to be plagiarism - this is a serious academic offence.

9.3. *FCE policies*

To avoid any misconduct/plagiarism please familiarise yourself with the content of FCE policies available from the following web site.

http://www/fce.unsw.edu.au/current_students/responsibilities.shtml#misconduct

9.4. *School policies*

Students should refer to the School policies at

<http://sistm.web.unsw.edu.au/student/schoolpolicies.html>

(This web site includes the School policy on "Special Consideration and Supplementary Examination")