#### VICTORIA UNIVERSITY OF WELLINGTON

Te Whare Wānanga o te Ūpoko o te Ika a Māui



### School of Information Management

# **INFO 527: Organisation of Information**

Trimester One 2008



Dr Chern Li Liew

Hello, and welcome to INFO 527 Organisation of Information, which will be coordinated by Chern Li Liew, with some modules taught by Alastair Smith. INFO 527 examines the tools, techniques and theories used in systems for the storage, processing and retrieval of information. The course includes design principles of the implementation of databases supporting enterprise information management, and also covers metadata knowledge representation schemes and indexing languages.

If you have any queries about the academic material or content of the course, you can contact me by:

Email: chernli.liew@vuw.ac.nz

**Room:** EA 212, Easterfield Building, on the second floor. If I'm not in my

room, send an email message, leave a note, or a phone message to

arrange a time to see me.

**Telephone:** (04) 463 5213 (for calls within the Wellington free calling area).

Alternatively, call the Administration Office on (04) 463 5103.

Freephone: 0800 11 62 99 (for students calling from outside Wellington; ask to be

transferred, or dial 5213 at the recorded message to talk to Chern Li).

Alternatively, the SIM Administrator can relay a message.

**Fax:** (04) 463 5446

If I am unavailable when you phone, please leave a message on my voicemail, or with the Administration Office on (04) 463 5103 or 0800 11 62 99. Email is usually the best way of contacting me to arrange a meeting (in person or by phone). If you wish to send something to me by **post**, my address is:

#### Chern Li Liew

School of Information Management Victoria University of Wellington PO Box 600, Wellington

Assignments should *not* be sent to the above address; all assignments will be submitted digitally. Non-assignment material being delivered by courier or in person should go to the SIM Administration Office, EA 121, Easterfield Building, Kelburn Campus, Victoria University of Wellington.

**MLIS Administrator:** Lori Parker

**Room:** 121 Easterfield Bldg, Kelburn Pde, Wellington

**Telephone:** 463 5309

Email: lori.parker@vuw.ac.nz

## Course materials

The course material for INFO 527 includes:

- this course information section (in which the contents of the INFO 527 course are discussed along with course-specific administrative information and Internet conference or internal session details);
- materials on the Blackboard website for INFO 527 (see 'Online information' for more on this) including a study guide for each module, discussion forum, etc.;
- a CD-ROM containing readings associated with each of the 12 modules, and the DB/TextWorks software used in the database project.

## Course description

INFO 527 examines how we organise knowledge resources, and construct information retrieval systems, so that users can readily find information. The focus of the course is tools, techniques and theories used in systems for the storage, processing and retrieval of information. Includes design principles of the implementation of databases for access to recorded knowledge.

The course content will include an overview of the following components of information organisation:

- Cataloguing, indexing, abstracting, and classification.
- Metadata structures, functions, and schemes.
- Access points and controlled vocabularies.
- Design and evaluation of databases and information retrieval systems.
- Relationship of information organisation to knowledge management.

## Introduction to INFO 527

Information resources come in a variety of formats, and are found in a diverse range of settings. Whether it is information in books, maps, scores, sound recordings, pictures, or electronic resources held by a library, in records relating to an historical event held in an archive, or in plans for a new commercial venture held in the records centre of a local business, we need to establish a system to link the user with the desired information. It is not sufficient simply to provide users with access to a store of documents or other items - some method of enabling users to find material relating to a particular topic or concept must also be provided. Piles of books stacked in a warehouse, or the large number of files available on the Internet, are not useful to users unless the material can be accessed in a way that allows them to retrieve relevant information appropriate to their needs.

This is not a straightforward task, and a number of potential problems arise. First, people searching for printed information may describe the concepts they are looking for using different language than that used by the authors of those documents. Second, the language used by the authors of those documents to describe the concepts may change over time. Third, people may in fact be searching for information that is not text-based -- it may be visual or aural. Fourth, we need information retrieval systems that meet the requirements of users in particular types of environments, such as libraries, archives, and corporate records centres. And fifth, the systems must be able to store large amounts of information, and quickly retrieve the most useful information for a particular request.

While INFO 527 will consider a range of information environments, the information retrieval tools we shall examine are those used to locate document based information in libraries, archives, and information centres.

#### These tools are:

- 1. Library catalogues, indexes, bibliographies, and archival finding aids.
- 2. Classification systems, which group together information on the same topic (INFO 526 Bibliographic Organisation, the elective course that follows on from this one, examines the Dewey Decimal Classification scheme in more detail).
- 3. Controlled vocabularies, such as thesauri and subject headings schemes, which structure and standardise the terminology used to describe subject concepts (INFO 526 provides further hands-on experience with the Library of Congress Subject Headings).
- 4. Text-based databases and retrieval systems, which enable us to store and retrieve documentary information efficiently.
- 5. Image and sound databases and retrieval systems, which focus on concepts such as spatial relations, colours, textures, and audio frequencies as cues for retrieval.
- 6. Internet search engines and filtering systems, which 'index' millions of electronic documents available from remote sites.
- 7. Newer developments in information retrieval, such as information organisation in social networking tools, the semantic web, and knowledge management.

# Learning objectives

By the end of the INFO 527 course, students should be able to:

- 1. Explain the need for different types of information retrieval systems in different contexts and organisations, in particular how enterprise information management is determined by the type of information environment, the users' information requirements, and the nature of the information resource involved.
- 2. Describe a model of information retrieval, and outline some measures of evaluation and effectiveness for a text-based information retrieval system.
- 3. Articulate the theory and functions of descriptive, administrative, and structural metadata in an information retrieval system.
- 4. Articulate the theory and functions of subject retrieval metadata -- including controlled vocabulary systems such as classification schemes, subject headings lists, and thesauri -- in an information retrieval system.
- 5. Explain the theory and practice of constructing indexes and abstracts, selecting appropriate index terms and distinguishing among the different types of abstracts.
- 6. Use appropriate design principles to create a database application for information retrieval.

7. Discuss issues in the provision of intellectual access to information involving newer forms of information retrieval systems.

8. Describe the relationship of *knowledge management systems* to information retrieval systems in private sector and public organisations.

## Practical work

As part of this course, you will need to use resources on the Internet, as well as selected databases and online services. Access to these services is possible from the School's computer laboratories and from Victoria University Library. Open learning students will require access to the Internet to access these databases, and will also need to authenticate some databases using their Student username and password. For more on this, see *LIM Programmes Information* on Blackboard.

INFO 527 will use a database application, DB/Textworks as an example of an information retrieval system. DB/Textworks is used in a number of information centres, and you will have access to a demonstration version. This will be included on your CD-ROM of course resources.

## Time commitment

To achieve satisfactory grades, you will need to spend approximately 12 hours per week on INFO 527, including time spent in the seminar/lab or Internet/audioconference sessions. You may find that particular aspects of the course require less time, whereas others may require slightly more time. It is important that you manage your time wisely, ensuring that you spend time outside of the weekly sessions reading the relevant course material from your text and the CD-ROM, any additional readings posted on Blackboard, doing the module's preparation work, and working on the assignments.

Before the session, you should have read the material for the week's topic, have looked at any additional course content in Blackboard, and be ready to discuss the readings and other preparation work.

## Course schedule

INFO 527 will be held in the first trimester (February-June) of the 2008 academic year. There will be no sessions for two weeks during the mid-trimester break (14-27 April).

#### **Internal students**

The weekly seminars will be held on Tuesdays (from 10.00-11.50 a.m.) in the Easterfield Building, EA 206. Additional tutorial sessions will be scheduled to introduce you to DB/Textworks.

#### **Open learning students**

The weekly Internet conference sessions will be held on Tuesdays from 5.00-6.30 p.m. A practical session for DB/Textworks, either online or face-to-face, will be arranged with interested groups.

#### **Open learning students (within Auckland)**

Sessions for Auckland students will be delivered by a mixture of audioconferencing and face-to-face teaching. Auckland students should refer to the separate 'Auckland mode' timetable for details.

## **Schedule**

Week	Date	Topic	Text chapters		
1	26 Feb.	Organising information for retrieval in diverse information environments	1		
2	4 March	Retrieval tools	2 & 3		
3	11 March	Encoding standards	4		
4	18 March	Metadata: schemes and description	6 & 7		
5/6	1 April	Metadata: access and authority control; Subject analysis and vocabulary control	8, 9 & 10		
7	8 April	Database technology and design	5		
Mid-term break					
8	29 April	Categorisation and arrangement	11 & 12		
9	6 May	Information architecture			
10	14 May	Evaluating information retrieval systems: relevance, precision, recall			
11	21 May	Information retrieval on the Web; the Semantic Web			
12	28 May	Knowledge management, image retrieval			

### Assessment

None of the LIM courses has a formal final examination. This course will be internally assessed. Further information, including submission instructions, are available on Blackboard.

Assignment	Date due	Value	Length
<b>1.</b> Report and presentation	Allocated week	40%	5 minute presentation +
on a reading	(starting from		report of 1500 words
	Week 3)		approx.
<b>2.</b> Creation of a database	Data dictionary	50%	<b>2.</b> Creation of a database
	due 15 April;		
	Final database due		
	27 May		
<b>3.</b> Peer learning	Evaluated weekly	10%	
Participation in the Weekly			
Discussion Forums			
(Blackboard)			

#### Late assignments

Assignments submitted after the due date and without prior arrangement with the course coordinator will have the mark reduced by 10 percentage points.

#### Presentation

Details of the LIM Group's assignment policy, including presentation, will be found in the *Administration Handbook*.

#### **Plagiarism**

You should read and take heed of the statement on collaboration and plagiarism above, and also in the *Administration Handbook*; you *must* acknowledge all sources you use.. While you are encouraged to work together while preparing for the weekly sessions, assessed work must be completed individually, and collaboration confined to discussion of general points. You are expected to present information in your own words, based on your understanding of the background material you read. *Any assignment which is extensively plagiarised will receive an automatic fail grade*.

#### **Submission**

All assignments for INFO 527 will be submitted digitally. See the Assignment section of the INFO 527 Blackboard site for details

# Prescribed text and recommended reading

The text for INFO 527 is:

Taylor, Arlene G. (2004). *The Organization of Information*. 2nd ed. Westport, Conn.: Libraries Unlimited. The price, including student discount, is \$117.95 approx.

#### Recommended reading

Links to further recommended texts will appear on the INFO 527 Blackboard site

#### Ordering the text

The prescribed text is available from Vic Books, PO Box 12-337 (or c/- Students' Union Building), Wellington, ph. (04) 463 5515 or freephone 0800 370 370, fax (04) 471 2124, email <a href="www.texts@vicbooks.co.nz">www.texts@vicbooks.co.nz</a>. You can use any of these methods to place an order. Please give the details of the book(s) you want, your delivery address, and your daytime phone number. If you have a credit card, you can also give your credit card number and expiry date, and the book will be sent to you directly. Otherwise, once your order is placed, you will be asked to send a cheque for the book(s) and postage. There is an \$8.00 handling and delivery charge. It is also possible to order texts through the Vic Books' online book ordering service at

http://www.vicbooks.co.nz/cms display.php

## Online information

You will be required to use the resources for this course, which are available in the School's Blackboard online learning environment:

http://blackboard.vuw.ac.nz/

The Blackboard environment will contain a weekly module study guide, a Web-based forum for discussion of issues related to the course, links to sites of interest, additional readings and information, updates, etc. You should read the module study guide in conjunction with the reading supplied on CD-ROM. Details on how to access Blackboard are in the *Administration Handbook*, but if you have any difficulties logging on please contact the Help Desk, at:

its-service@vuw.ac.nz

All LIM students will be automatically enrolled in LIM Programmes Information on Blackboard. General announcements and information will be posted here, and students should check this site regularly.

#### Internet conferencing

Distance sessions are now being conducted via the Internet using the Chatterbox application; in order to participate students will need an Internet-connected PC running Vista, Windows XP or Windows 2000, microphone, and headphones/speakers. To connect, go to the Internet conferencing page (and read the "Getting Started" information) at

https://conferencing.sim.vuw.ac.nz/

There is also an 'Internet Conferencing' button linking to this page in Blackboard.

Some days before your first session, and at least 15 minutes before each subsequent session, you should test your system by going to the Echo Room. Regular classes will be held in the LIS Room; additional Discussion Rooms are available for breakout groups, and as a "waiting room" if a class is proceeding in the main LIS room. Study groups can use the discussion rooms out of regular class times. For further information, follow the help links on the Internet Conferencing page; details, including screen name conventions, are also available on Blackboard under LIM Programmes Information.

#### LIM Students email list

Staff of the LIM programmes use the lim-students email discussion list to make important announcements, and to share news and ideas relating to the LIM programmes. It is very important that you are subscribed to this list. Please make sure that a current email address which you check regularly is subscribed. We suggest that you remain a member of this list until after you graduate, because the list is used as the main channel to communicate important administration messages (including those about arrangements for graduation).

Emails are sent to lim-students regularly, so if you have not received any list messages for a few weeks it is a good idea to make sure you are still subscribed. If a list message is rejected by your email account you will automatically be unsubscribed from the list. To subscribe, unsubscribe, and change your email address or options, go to

http://lists.vuw.ac.nz/mailman/listinfo/lim-students

**Confirmation:** When you subscribe or unsubscribe to lim-students, you will receive a confirmation message. To confirm the action, click reply and send. You will then receive a welcome or goodbye message.

# General University information

#### **Faculty of Commerce and Administration Offices**

Railway West Wing (RWW) - FCA Student and Academic Services Office

The Faculty's Student and Academic Services Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course status and give further advice about FCA qualifications. To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

#### Easterfield (EA) - FCA/Education/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce and Administration, Education and Law is situated in the Easterfield Building on the ground floor (EA005). This counter is the first point of contact for :

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- Forms for FCA Student and Academic Services (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

#### **Notice of Turnitin Use**

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine <a href="http://www.turnitin.com">http://www.turnitin.com</a>. Turnitin is an online plagiarism prevention tool which identifies material that may have been copied from other sources including the Internet, books, journals, periodicals or the work of other students. Turnitin is used to assist academic staff in detecting misreferencing, misquotation, and the inclusion of unattributed material, which may be forms of cheating or plagiarism. At the discretion of the School, handwritten work may be copy typed by the School and subject to checking by Turnitin. You are strongly advised to check with your tutor or the course coordinator if you are uncertain about how to use and cite material from other sources. Turnitin will retain a copy of submitted materials on behalf of the University for detection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

#### **General University Policies and Statutes**

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being

studied; see the Victoria University Calendar or go to <a href="https://www.victoria.ac.nz/home/about/policy/students.aspx">www.victoria.ac.nz/home/about/policy/students.aspx</a>. For information on the following topics, go to the Faculty's website <a href="https://www.victoria.ac.nz/fca">www.victoria.ac.nz/fca</a> under Important Information for Students:

- Academic Grievances
- Student and Staff Conduct
- Meeting the Needs of Students with Impairments
- Student Support

#### **Academic Integrity and Plagiarism**

Academic integrity is about honesty – put simply it means *no cheating*. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. The University defines plagiarism as follows:

The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other students or staff.

It is still plagiarism even if you re-structure the material or present it in your own style or words.

Note: It is however, perfectly acceptable to include the work of others as long as that is acknowledged by appropriate referencing.

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalized severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- cancellation of your mark for an assessment or a fail grade for the course
- suspension from the course or the University.

Find out more about plagiarism, and how to avoid it, on the University's website: <a href="https://www.victoria.ac.nz/home/studying/plagiarism.html">www.victoria.ac.nz/home/studying/plagiarism.html</a>

#### Manaaki Pihipihinga Programme

Manaaki Pihipihinga is an academic mentoring programme for undergraduate Māori and Pacific students in the Faculties of Commerce and Administration, and Humanities and Social Sciences. Sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade (back courtyard), Room 109D, and Room 210, Level 2, Railway West Wing. There is also a Pacific Support Coordinator who assists Pacific students by linking them to the services and support they need while studying at Victoria. Another feature of the programme is a support network for Postgraduate students with links to Postgraduate workshops and activities around Campus.

For further information, or to register with the programme, email <a href="manaaki-pihipihinga-programme@vuw.ac.nz">manaaki-pihipihinga-programme@vuw.ac.nz</a> or phone (04) 463 6015. To contact the Pacific Support Coordinator, email <a href="manaaki-pihipihinga-programme@vuw.ac.nz">pacific-support-coord@vuw.ac.nz</a> or phone (04)