

## School of Information Management

## **INFO 325 - TELECOMMUNICATION IN BUSINESS**

Trimester One 2008

## COURSE OUTLINE

#### **Contact Details**

Course Coordinator

& Lecturer: Tony Thistoll

Room: EA 208 (Level 2, Easterfield Building, Kelburn Campus)

Phone: 021 446 270

Email: tony.thistoll@vuw.ac.nz
Office hours: Tuesday 9.00am - 9.50am

Friday 9.00am - 9.50am

Tutor: Felicity Stickney

Email: sticknfeli@student.vuw.ac.nz

#### **Class Times and Room Numbers**

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***************************************	Lectures:	Tuesday	8:00 - 8:50	Hugh Mackenzie LT003
		Friday	8:00 - 8:50	Hugh Mackenzie LT003
	Tutorials —	Tuesday	9:00 – 9.50	HU 221
	From Week 3	Friday	9:00-9:50	HU113
		Friday	14:10 - 15:00	OK523
	Examination:	In-class supervise	To a thirthead and a share and a share	

Note: Please sign-up for your tutorials will be by using the blackboard course site. Numbers are limited for each tutorial. Tutorial places will be allocated on a first-in, first-served basis. Queries about tutorial allocations should be addressed to the Tutor.

## **Course Objectives**

## Course Description

A Study of current telecommunications technologies from a business and management point of view, covering the pertinent developments in communications protocols, telecommunications service options, networks operations, bandwidth, Internet and data transfer applications.

"Telecommunications and the technologies that have been converging around it are arguably the fastest-moving, most exciting group of industries on earth" TUANZ. 2005.

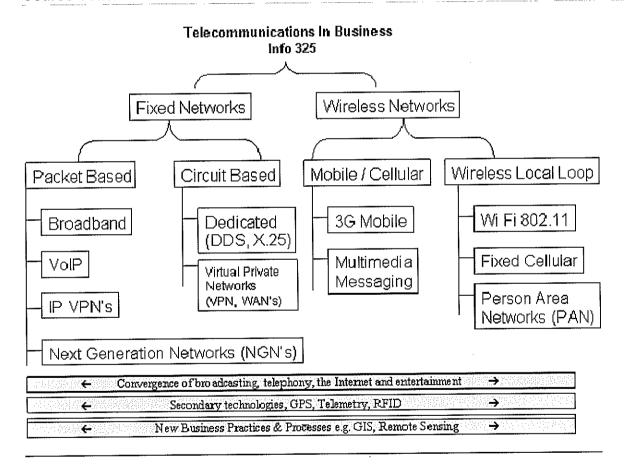
<sup>&</sup>lt;sup>1</sup> TUANZ (2005) <u>Digital Strategy and Communications Technology Issues</u> A briefing paper for the incoming Minister of Communications and Information Technology (Unpublished). <u>http://www.tuanz.org.nz/tuanz/submissions/submissions\_home.cfm</u> (accessed 22 January 2006)

## Course Objectives

On completion of the course students will be able to:

- 1. Describe the major telecommunications technologies used within businesses today.
- 2. Analyse from a commercial perspective an extensive range of telecommunication technologies and solutions identifying advantages and limitations.
- 3. Analyse from a commercial perspective emerging telecommunication technologies and proposed standards that could influence the way businesses conduct business.
- 4. Identify emerging technologies that allows us to go online anytime anywhere.
- 5. Describe and discuss key factors impacting on adoption and take-up of telecommunication technologies and solutions.
- 6. Competently discuss key managerial and organisational issues surrounding telecommunications in business.

#### **Course Content**



#### Lectures

Lectures will complement the online material and the readings but will NOT necessarily cover exactly the same material. The lecture sessions will offer a range of experiences including some or all of: discussions, case studies, web examples, guest speakers, critiques and alternative viewpoints on the topics. Lecture material will not necessarily be published on Blackboard and lecture slides will not necessarily be available. All lecture material is assessable.

Class	Date	Topic	Preparation	Comments
Week 1	26 Feb	Introduction	Chapter 1	
Classes 1 & 2	29Feb	Course Overview		
		Assessment		
		What is		
		Telecommunications		
Week 2	04 March	The Basics	Chapter 2	
• • • • • • • • • • • • • • • • • • • •	07 March	What technologies we	_	
		use, fixed networks		
Week 3	11 March	Data Communications	Chapters 3&4	
	14 March	(Circuit Based)		
Week 4	18 March	Network Topology &	Chapters 5&6	No lecture
	21 March	Architecture	_	on Friday 21
	(Good Friday			March
	no lecture)			Public
	,			Holiday
Week 5	25 March	Enterprise Networks	Chapter 8	
	28 March	Voice Over IP (VoIP)	Plus posted	
		IP VPN's	readings	
Week 6	01 April	Next Generation	Chapters 27 &	Guest
	04 April	Networks	28	Lecturer
	1	NGN's		
Week 7	08 April	The World is Flat	Suggested Reading	
	11 April		- The World is Flat	
	_			
	15 & 18 April			*****
Mid term break	22 & 25 April		η	
Week 8	29 April	Secondary	Posted readings	
	02 May	Technologies		
		e.g. GPS		
		Business Application		
****		- GIS & Remote Sensing		
Week 9	06 May	Business Applications	Posted readings	
****	09 May		Chapters 26	
Week 10	13 May	- 3G Mobile & Beyond	Chapters 23 & 24	Guest
	16 May	Mobile Applications	Posted readings	Lecturer
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Week 11	20 May	Emerging Technologies	Posted readings	
	23 May	& Issues		
W1-10	27 Marr	Cummingue		1
Week 12	27 May	Summing up		
	30 May	Preparing for		
		Assessment In class Assessment		
L		III Class Assessment	<u> </u>	<u> </u>

## <u>Tutorials</u>

There will be tutorials for this paper, which begin in week 3. The format for tutorials and tutorial streams will be discussed in the first lecture. Below is an indicative guide to tutorial sessions and content: Please note that due to Easter and the public holiday on Good Friday there will be no tutorials in week 4.

Week	Date	Topic / Comments
Week 3	11 March	Tutorials begin

	14 March	Choosing presentation topics and teams
Week 4	18 March	No Tutorials (Good Friday no classes)
	21 March	
Week 5	25 March	Understanding User Requirements
	28 March	
Week 6	01 April	Case study in Telecommunications
	04 April	
Week 7	08 April	Case study in Telecommunications
	11 April	
Week 8	29 April	Group Presentations
	02 May	
Week 9	06 May	Group Presentations
	09 May	
Week 10	13 May	Group Presentations
	16 May	
Week 11	20 May	Preparation for in-class supervised assessment
	23 May	
Week 12	27 May	No tutorials last week
	30 May	

## **Expected Workload**

There are 12 weeks of lectures, and 8 weeks of tutorials/active learning sessions; a 2 week mid-term break. The workload expectation for Info325 in Trimester 1 will be about 16 hours per week. The times you should expect to spend each week in the following activities are set out below:

2 hours attending classes (1 x 2-hour classes);

1 hours attending your tutorial

5 hours background reading and pre-class/pre-tutorial preparation;

7 hours on assignments;

1 hours post-class review and final assessment revision;

This is an average workload. Your actual workload will vary both with individuals and from week to week during the trimester.

#### Readings

The prescribed textbook provides a good summary of many key topics and issues and is well laid out and easy to read. You are expected to complete the required reading for each week. As the course is a balance between technical and business issues a number of journal articles will posted on blackboard for reading prior to the appropriate lecture as per the lecture schedule.

#### **Set Text:**

Martha Rosengrant. Introduction to Telecommunications, 2/E. Prentice Hall, 2007.

ISBN-10: 0131126156

## Suggested Reading

Carr, Houston H. & Synder, Charles A. The Management of Telecommunications: Business Solutions to Business Problems enabled by Voice and Data Communications. McGraw-Hill Irwin, New York, 2003.

International ISBN 0-07-119928-4

Friedman, T. L. (2006). The World is Flat - The Globalized Word in the Twenty First Century. London, Penguin Books.

ISBN-13 978-0-141-02272-7

## **Materials and Equipment**

## Lab Access

Information Systems and Electronic Commerce students have access to a range of computer lab facilities. This means that you can still undertake this course even if you don't have a computer at home. Like all university students you are able to use any SCS computer lab throughout the University (this includes labs in the Murphy building, the Library and in the Law School) as long as you have a current SCS account. If you don't have a current SCS account, contact either the SCS helpdesks in the library or the Murphy building. In addition, INFO and ELCM students have access to the purpose built school lab MY201. This lab is located on the second floor of the Murphy building. Please note that specialist software found in the SIM labs is not available in all the SCS labs (e.g. macromedia products).

MY 201 offers 24-hour access via student ID cards unless booked for another class. Please check the booking schedules on the lab doors before entering a laboratory to ensure that you are not interrupting a class, and you can finish your work before the next scheduled class. You may be asked to leave the lab by a supervisor if the machine you are using is required for a scheduled class. Please pack-up and leave the lab promptly if asked to do so. If you are sharing the lab with a scheduled class please use machines furthest away from the projection screen first and avoid interrupting the taught class with noise.

The food and drink ban in the labs will be enforced, please respect this in order to keep the facilities clean and in good working order for everyone.

#### **Assessment Requirements**

Course assessment is divided up as per the schedule below.

Assessment	<u>%</u>	<u>Date</u>
Research Essay - Telecommunication Reforms	35%	11 April
Group Presentation Report - Topical Issues	15%	In Tutorials TBA
Essay - The Application of Telecommunications	30%	16 May
In class - Supervised Assessment	20%	30 May

# Overview - Research Essay - Telecommunication Reforms - 35 % of final mark

The Dominion Post has just published an article titled, "Telecom facing tough front", by journalist Jon Hoyle, February 16, 2008. In this article a research director from Telecommunications Consultancy Group Ovum is quoted as saying:

Telecom, once the least regulated telecoms company in the world is attempting to juggle a wide range of complex tasks stemming from its Government-decreed split into three business units and local loop unbundling (LLU)... They're facing probably the biggest regulatory turnaround in any market... (Hoyle, 2007)

You are required to research, analyse and discuss this regulatory turnaround and the implications for telecommunications users and telecommunication organisations in New Zealand.

Be sure to cover the following areas in your paper:

- Key policies, regulations and actions of the New Zealand Government related to Telecommunications reform
- Key drivers for the reforms
- Outcomes resulting from these reforms
- Actions and positions of telecommunication providers resulting from these reforms
- International best practice in regards to Telecommunications reform
- You own conclusion as to success of these reforms

#### Overview – Presentation Report: 15 % of final mark

These are group presentations to your tutorial class. The presentation will be on key leading edge technologies, and business practices that have occurred in recent years that impact on telecommunications. Your assessment for this task will focus on your presentation content and the quality of the research your group does for the presentation, as well as the quality of the presentation itself.

Group size will be 3 people per group, and each group will be given a specific technology topic, which will be allocated in the first tutorial. Groups will also be allocated their presentation date at the first tutorial. You and your group will then be asked to investigate the topic and prepare a succinct management briefing for the class. Presentations should be planned to be 15 minutes long, allowing 5 minutes for questions (total 15-20 minutes maximum).

As part of the assignment you are required to prepare a 3-4 page hand out for your fellow students on the topic.

## Overview - Essay - The Application of Telecommunications: 30% of final mark

In this essay, you are to choose an industry and report on how advances in telecommunications technologies are being used within the industry to the benefit of key stakeholders.

## In class - Supervised Assessment: 20 % of final mark

The final exam for this paper will be in the form of an in-class supervised assessment which will be 50 minutes long and will require you to answer short answer discussion questions.

## Format of assignments

Assignments must be submitted in hard copy to the course coordinator. They should be computer-formatted, 12pt font, 1.5 line spacing, and single sided pages to allow for written comments on the paper. Appendix material does not count toward the required assignment length.

## Assignment Submission

Printed versions of the essay must be posted into the assignment hand-in box by the nominated due date or handed in at the end of the lecture. The assignment hand-in box is located on the first floor of the Easterfield Building, in the School of Information Management.

## **Penalties**

In fairness to other students, work submitted after the deadline will incur a 10% penalty (of the marks achieved for the assignment) for each day late.

In the event of bereavement or prolonged illness affecting your ability to meet the deadline, discuss your situation with the Course Coordinator. You must verify your claim, e.g., produce a medical certificate. Extensions will only be granted under these conditions.

#### Important Notes:

- <u>No extension is possible based on a student's workload</u>. You are expected to manage your workload to ensure there is sufficient time to complete assessments as required.
- You are expected to back up your work From time to time files are lost, computers crash, etc., so it is critical that you get into the habit of backing up important files (Flash drives for example).
- <u>Do not leave submitting your work to the last minute</u> technology problems do occur (especially on the day an assignment is due). Be smart and submit it in plenty of time. Extensions will not be granted due to problems with submitting work.
- Working together You are encouraged to discuss aspects of your assignments with others. However, when it is time to develop your solution, the work must be ENTIRELY your own. In this way, we will have your perspective on the topic not someone else's!

## **Mandatory Course Requirements (Terms)**

In addition to achieving the minimum course mark required for a pass this course (50%), you must:

- Be correctly enrolled in the course.
- Attain at least 40% of the possible marks for the final supervised assessment.
- Attain a weighted average over all assessments of at least 50%.

These requirements will be strictly observed.

#### Communication of Additional Information

All formal notices relating to this course will be posted on Victoria University's Blackboard system: http://blackboard.vuw.ac.nz

You are expected to check for announcements on Blackboard on a regular basis.

#### Use of Blackboard

Course Material: Basic course material and announcements will be published on Blackboard on a regular basis.

Announcements: The announcements page for the course will be used to distribute course announcements. You are required to check the announcements regularly.

**Discussion Board:** Moderated discussion forums will be provided for assignment work. Staff members will attempt to answer all reasonable questions. In some cases you may be requested to make an appointment as not all questions can be easily answered using this medium

#### **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 - it includes the ground floor reception desk (EA005) and offices 125a to 131 (Level 1). The office is available for the following:

- 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.

## 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 available in hard copy or under 'About Victoria' on the VUW home page at www.vuw.ac.nz.

#### Student and Staff Conduct

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps are to be taken if there is a complaint. For information about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor or refer to the statute on the VUW policy website at www.vuw.ac.nz/policy/studentconduct. The Policy on Staff Conduct can be found on the VUW website at www.vuw.ac.nz/policy/staffconduct.

#### **Academic Grievances**

If you have any academic problems with your course you should talk to the tutor or lecturer concerned; class representatives may be able to help you in this. If you are not satisfied with the result of that meeting, see the Head of School or the relevant Associate Dean; VUWSA Education Coordinators are available to assist in this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievances Policy which is published on the VUW website at www.vuw.ac.nz/policy/academicgrievances.

## 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 student 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 penalised 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 at www.vuw.ac.nz/home/studying/plagiarism.html.

## **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 on-line 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 maybe forms of cheating or plagiarism. At the discretion of the Head of School, handwritten work maybe 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.

## Students with Impairments

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities the same opportunity as other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, please contact the Course Coordinator as early in the course as possible. Alternatively you may wish to approach a Student Adviser from Disability Support Services (DSS) to discuss your individual needs and the available options and support on a confidential basis. DSS are located on Level 1, Robert Stout Building, telephone (04) 463 6070, email disability@vuw.ac.nz. The name of your School's Disability Liaison Person is in the relevant prospectus or can be obtained from the School Office or DSS.

## **Student Support**

Staff at Victoria want students to have positive learning experiences at the University. Each Faculty has a designated staff member who can either help you directly if your academic progress is causing you concern, or quickly put you in contact with someone who can. Assistance for specific groups is also available from the Kaiwawao Māori, Manaaki Pihipihinga or Victoria International.

In addition, the Student Services Group (email student-services@vuw.ac.nz) is available to provide a variety of support and services. Find out more at www.vuw.ac.nz/st\_services/.

VUWSA employs Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and Faculty delegates. The

Education Office (tel. 04 463 6983 or 04 463 6984, email education@vuwsa.org.nz) is located on the ground floor, Student Union Building.

# Manaaki Pihipihinga - Maori and Pacific Mentoring Programme (Faculty of Commerce and Administration)

This is a mentoring service for Maori and Pacific students studying at all levels. Weekly one hour sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade, and Room 210 and 211, Level 2, Railway West Wing. Sessions cover drafting and discussing assignments, essay writing, and any questions that may arise from tutorials and/or lectures. A computer suite networked to Cyber Commons is available for student use.

To register with Manaaki Pihipihinga, please contact one of the following:

Puawai Wereta

Manaaki Pihipihinga Coordinator

Room 210, Level 2 Railway West Wing

Tel. (04) 463 8997 Email: Puawai.Wereta@yuw.ac.nz Fa'afoi Seiuli

Pacific Support Coordinator

Room 109 B

14 Kelburn Parade

Tel. (04) 463 5842

Email: Faafoi.Seiuli@vuw.ac.nz

The Pacific Support Coordinator is also available on the Pipitea Campus, Room 212, Level 2, Railway West Wing, every Thursday, 1-4pm. No appointment is necessary. You can either come in, email or phone with any issue that you need help with. Fa'afoi links Pacific students to the services and support they need while studying at Victoria.

## Appendix - Websites of Interest - Resource Material

There is numerous technology and telecommunications related websites on the Internet. Some suggestions are:

www.digitalstrategy.govt.nz

NZ Government Digital Strategy

www.ict-nz.org.nz

ICT - New Zealand Website

www.stuff.co.nz/infotech.html

General IT, eCommerce news articles in New Zealand

www.brint.com

news, articles, white papers

หางพ.whatis.com

A glossary of terms

www.howstuffworks.com

 $Brief\ descriptions\ of\ technical\ items$ 

Telecom Paper

Telecommunications Industry Papers

BBC Technology News

BBC technology news sites

Information resources for IT professionals - ZDNet

http://cyberatlas.internet.com/

Cyber Atlas

International Telecommunications Union

 $ITU\ coordinate\ global\ telecom\ networks\ services.$ 

**CNET News** 

Worldbank

Has country specific Telecommunication reports

TUANZ

Telecommunication Users Association of New Zealand

Ministerial Enquiry into Telecommunications

Ministry of Economic Development - Telecommunications Sector