

## School of Information Management

# **INFO 325 - TELECOMMUNICATIONS IN BUSINESS**

Trimester One 2011

### **COURSE OUTLINE**

#### **Names and Contact Details**

#### Instructor and course coordinator

Allan Sylvester

allan.sylvester@vuw.ac.nz

Office hours:: Wednesday and Friday after class for 1 hour.

#### **Senior Tutor**

Xiaoyi Guan

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Ph: 463-6998 Room: RH502

#### **Trimester Dates**

Teaching Period: Monday 28 February – Friday 3rd June First Lecture Wed 2 March – Last Lecture Friday 3<sup>rd</sup> June

Study Period: Monday 6 June – Thursday 9 June

Examination Period: Friday 10 June – Saturday 2 July (inclusive)

#### 1. Withdrawal from Course

Your fees will be refunded if you withdraw from this course on or before 11 March 2011.

The standard last date for withdrawal from this course is 14 May. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an 'Application for Associate Dean's Permission to Withdraw Late' including supporting documentation

The application form is available from either of the Faculty's Student Customer Service Desks.

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

**Lectures: GBLT4,** Wednesday and Friday 11:30am – 12:20pm

**Tutorials:** 1hr tutorials will take place from Week 2 to Week 12 - time and place and sign up information will be provided on Blackboard in Week 1.

### **Course Content**

Week	Date	Class	Торіс	Assessment	Reading	
	2 Mar	L1	Analogue/Digital signals,		Ch1 pp4-9	
1			bandwidth	ndwidth		
	No tutorials this week – sign up for a tutorial group					
	4 Mar	L2	OSI and TCP/IP stacks		Ch1 pp15-19	
	9 Mar	L3	Local Area Networks		Ch6 pp198-222	
2		T1	TCP/IP			
2	11 Mar	L4	Wide Area and Metropolitan Networks		Ch9 pp293-324	
	16 Mar	L5	Wi-Fi (802.11)		Ch7 pp231-241	
3		T2	Networks			
	18 Mar	L6	Domain Name System		Ch5 pp157-172	
	23 Mar	L7	Network Neutrality		See Blackboard	
4		T3	DNS			
	25 Mar	L8	Social and New Media		See Blackboard	
	30 Mar	L9	Messaging		Ch2 pp53-59	
5		T4	Network Neutrality			
	1 Apr	L10	Standards and Treaties		Ch1 pp22-25	
	6 Apr	L11	PSTN/POTS		See Blackboard	
6		T5	Messaging			
	8 Apr	L12	Cellular Radio Networks		Appendix D	
	13 Apr	L13	3G Cellular Systems		See Blackboard	
7		T6	PSTN			
,	15 Apr	L14	Convergence	Essay Due	Appendix C and	
Mid-Term Break  Blackboard  Mid-Term Break						
	4 May	L15	Open Access		Ch10 pp336-357	
8	+ May	LIS	Open recess		and Blackboard	
		Т7	Convergence			
	6 May	L16	International data carriers		See Blackboard	
	11 May	L17	Broadband		See Blackboard	
9	· · · · · ·	T8	Open Access			
	13 May	L18	Sensor and short range networks		See Blackboard	
	18 May	L19	WiMax		Ch7 p241 and Blackboard	
10		Т9	Broadband			
	20 May	L20	Web and Web2.0		Ch2 pp49-51	
11	25 May	L21	Service providers		See Blackboard	
		T10	Wi-Max			
	27 May	L22	Monetisation	Business Case due 11:20am	See Blackboard	
	1 Jun	L23	Satellites and GPS		See Blackboard	
12	No tutorials this week					
	3 Jun L24 Revision					
		l		I	1	

This course is an exploration of telecommunications in business as it applies to a New Zealand perspective in 2011. Topics and technologies are introduced and discussed in lectures and followed up tutorial classes. Students are expected to follow up the material with personal learning strategies such as reading widely, exploration online materials and carrying out personal supplementary research associated with the assignment topics. The key concepts for modern telecommunications are introduced early and used later in the course to explore the technologies that make up telecommunications infrastructure. This understanding provides students with the understanding to carry out a critical examination of the commercial, social and organisational applications of telecommunications technologies as they evolve.

**Course Learning Objectives** 

	By the end of INFO325, students should be able to:	Learning goals	Major attributes
1	Describe the major telecommunications technologies used within	LG1	MA2,MA3
_	businesses today.	7.01	25142512
2	Analyse from a commercial perspective an extensive range of	LG1	MA1,MA2
	telecommunication technologies and solutions identifying		
_	advantages and limitations.		
3	Analyse from a commercial perspective proposed standards that	LG3	MA5,MA7
	could influence the way businesses conduct business.		
4	Identify emerging technologies that allow connectivity anytime	LG1	MA4
	anywhere.		
5	Describe and discuss key factors impacting on adoption and take-	LG3	MA4,MA2
	up of telecommunication technologies and solutions.		
6	Summarise and discuss key managerial and organisational issues	LG4	MA6,MA2,
	surrounding telecommunications in business.		MA1

#### **Course Delivery**

#### **Lectures:**

- Face to face lectures are the primary delivery medium for this course.
- Materials posted on Blackboard are designed to supplement classes; you cannot count on Blackboard for a complete view of the course.
- Topics that arise from in class discussion are part of the course and may form part of the final examination. The broadband scene in New Zealand and internationally is evolving rapidly, items sourced from current news may well be part of our discussion.
- There is a direct link between attendance in class and overall success in the course.
- Guest lectures and videos may be used to supplement the topics covered and are part of the assessable material of the course. *Note. Guests may make their materials available, but you shouldn't count on it.*
- Please take your own notes. My slides are useful for me to keep track of the flow of the course material and can act as part of your notes however, they shouldn't be thought of as a replacement for your own personal learning strategy.

#### **Tutorials:**

- Tutorials for INFO325 have two functions:
  - 1. To provide a supplemental discussion of some of the more technical aspects covered in lectures.
  - 2. As a way of preparing for and discussing the assignment topics. Specific support for the assignments will be covered in tutorials and an opportunity for feedback on your essay plan will be provided.

#### **Blackboard discussion forums:**

• You are strongly encouraged to participate in discussions on Blackboard.

#### **Expected Workload**

The faculty guideline suggests for a 15 point paper you should plan to spend (per week):

- 2 hrs attending lectures
- 1 hr attending tutorial
- Up to 7 hrs doing readings, doing independent topic research, preparing for lectures and tutorials and writing assignments.

#### **Readings**

- **Textbook:- Business Data Communications and Networking 10/e** by FitzGerald & Dennis.ISBN: 0-470-05575-8
- Supplemental readings and links will be posted on Blackboard.
- Students are also expected to follow the news for materials and announcements related to ultra-fast broadband and telecommunications market developments.

**Assessment Requirements** 

Assessment item	Date	Objective tested	Percentage
Essay (2000 words)	11:20am 15 April	1,2,3,4	25%
Business Case (2000 words)	11:20am 27 May	2,3,5	25%
Tutorial participation.	Attend and participate in six out of ten tutorials.	All	10%
Final Examination (2	As announced in the	All	40%
Hour exam)	examination timetable.		

#### The following note should be included in every course outline:

Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and audit purposes. The findings may be used to inform changes aimed at improving the quality of FCA programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

#### **Examinations**

Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period. The final examination for this course will be scheduled at some time during the period from Friday 10 June – Saturday 2 July 2011.

#### **Penalties**

The penalties to be incurred for late submission of work or for exceeding work limits are: 10% of the available marks per day late.

#### **Mandatory Course Requirements**

To pass the course you must obtain more than 40% of the available marks in the final examination and achieve an overall score of more than 50% across the course after the application of any relevant weighting factors to none, some, or all assessments.

You are required to attend at least six out of the ten available tutorials.

#### **Class Representative**

A class representative will be elected in the first class, and that person's name and contact details made available to VUWSA, the Course Coordinator and the class via the Blackboard site. The class representative provides a communication channel to liaise with the Course Coordinator on behalf of students.

#### **Communication of Additional Information**

Changes and announcements to do with the course will happen via Blackboard as the primary communications channel – please check Blackboard regularly. Blackboard will also contain additional reading materials and links to online resources.

Additionally, administration items are flagged at the beginning of lectures – attendance in class is your best means of knowing what is happening in the course.

#### **Use of Turnitin (if applicable)**

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 compares submitted work with a very large database of existing material. At the discretion of the Head of School, handwritten work may be copy-typed by the School and subject to checking by Turnitin. 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.

#### For the following important information follow the links provided:

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

http://www.victoria.ac.nz/home/study/plagiarism.aspx

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

Find key dates, explanations of grades and other useful information at www.victoria.ac.nz/home/study

Find out about academic progress and restricted enrolment at <a href="http://www.victoria.ac.nz/home/study/academic-progress.aspx">http://www.victoria.ac.nz/home/study/academic-progress.aspx</a>

The University's statutes and policies are available at <a href="http://www.victoria.ac.nz/home/about/policy">www.victoria.ac.nz/home/about/policy</a>, except qualification statutes, which are available via the Calendar webpage at <a href="http://www.victoria.ac.nz/home/study/calendar.aspx">http://www.victoria.ac.nz/home/study/calendar.aspx</a> (See Section C).

Further information about the University's academic processes can be found on the website of the Assistant Vice-Chancellor (Academic) at

www.victoria.ac.nz/home/about\_victoria/avcacademic/default.aspx

# AVC (Academic) Website: information including: Conduct, Academic Grievances, Students with Impairments, Student Support

http://www.victoria.ac.nz/home/about\_victoria/avcacademic/Publications.aspx

# Faculty of Commerce and Administration Offices <a href="http://www.victoria.ac.nz/fca/studenthelp/">http://www.victoria.ac.nz/fca/studenthelp/</a>

Manaaki Pihipihinga Programme http://www.victoria.ac.nz/st\_services/mentoring/

#### MARKING RUBRIC for essay assignment.

#### Academic Essay.

Describe and discuss the New Zealand government ultra-fast broadband (UFB) plans. This essay will examine the background, the current plans and activities and the possible outcomes. It will need to:

- Describe the technical challenges and barriers for fibre rollout in New Zealand.
- Discuss the social and economic benefits and potential impacts of UFB rollout (or lack of) to New Zealand.
- Discuss the demand profile for UFB adoption.
- Contrast New Zealand's plans with Australia's equivalent.
- Describe and discuss the role (or not) of network neutrality and open access.
- Provide an opinion or prediction of the current and emerging state of urban and rural broadband in New Zealand.

#### 2000 words, properly APA referenced (25%)

	A	В	С	D
Description of	Clearly	Some coverage	Minimal	Not mentioned
New Zealands	articulated	but lacks depth	description	
UFB plans.				
Reflective	Shows true	Some	Minimal	None
evaluation of	insight	understanding	appreciation	
UFB policy.			shown	
Technology	Multiple	Two	One	None
layers described				
using standard				
systems				
architectural				
language				
Breadth of	Comprehensive	Adequate	Few	Minimal
reading and refs				
Understanding	Shows clear	Some	Surface use only	Doesn't
of economic and	understanding	appreciation		
social				
consequences of				
technology				
adoption.				
Contrasting with	Excellent	Good discussion	Some	No real
Australia	discussion		understanding	understanding
Understanding	Shows clear	Some	Surface	No idea
of open access	understanding	appreciation	understanding	
and net			only	
neutrality.				
Originality	Shows	some new ideas	derivative	copied
	independent			
	thought			
Argument	Logical Flow	Understandable	Hit and miss	Confused

Depth of investigation of		Excellent	Good	OK	Poor
	topic				
Foci	us	All content to	a little	noticeable	Didn't answer
		the point &	extraneous	irrelevant	the question
		relevant	material	material	
	entation	Excellent	Good	OK	Poor
APA	A citation	Exact	Minor	Incorrect	Not used
			Inconsistencies	formatting	
Essa	ay Format	Structured	Bit wandering	confused	Messy
Woı	rd Count	As required		outside the	much too short
				specification	or too long
			What was delivered		
A		learning and	Shows insight, has reflected on their personal learning		
		ng that is the best	strategies, understands the implications of using a		
	that could re	•	particular philosophy, has critically evaluated their		
	expected in	this course.	learning. Has presented their personal approach to their		
			topic.		
В	Highly satisfactory		Has described the technology, how they are used, has		
	but lacks the		shown some understanding of the economic and social		
	distinguishes A		issues and their justification, but not to the level for an		
			A.		
C			Has made good attempt at the assignment, but has not		
	but not of the same standard		demonstrated real insight about the consequences or		
	as a B.		problems of the UFB plans. Justification may not be		
<u></u>			explicitly shown.		
D	J 11 1		May have described some technologies but not shown		
	at the lower end of what is		that they know how to apply them. Little or no		
	acceptable from a Masters		reflection on how knowledge of UFB might affect their		
_	student.		approach to their understanding of the topic.  Below the standard expected from a 300 level student.		
F	Less than acceptable.		Below the standar	d expected from a 3	300 level student.

#### MARKING RUBRIC for business case assignment.

#### Business case.

Examine the case scenario provided in class and prepare a business case that covers:

- Describe the key technology issues in language suitable for an intelligent but non-technically trained audience.
- Discuss the key business benefits.
- Describe the stakeholders in the scenario and discuss their roles.
- Prepare a benefit-realisation description that addresses, time required to realise benefits, return on investment and non tangible evaluation of benefits.
- Make and justify a recommendation to proceed (or not).

#### 2000 words (25%)

	A	В	С	D
Discussion of	Clearly	Described, but	Minimal	Not mentioned
key technology	articulated in	not targeted	description	
issues	correct language	correctly		
Convincing	Insightful	Adequate	Minimal	Unconvincing
depth of			coverage of key	
business			issues	
analysis				
Business	Multiple	Two	One	None
benefits	_			
discussed				
Relevance of	Comprehensive	Adequate	Few	Minimal
benefits to case.	_	_		
Understanding	Shows clear	Some	Surface use only	Doesn't
of Benefit	understanding	appreciation		
realisation				
Actively	Excellent use	Good discussion	Some	No real
engaged with			understanding	understanding
Use of	Shows clear	Some	Surface use only	Doesn't
stakeholder	understanding	appreciation		
analysis				
Originality	Shows	some new ideas	derivative	copied
	independent			
	thought			
Convincing	Logical Flow	Understandable	Hit and miss	Confused
business case				
Professionalism	Excellent – of	Good	OK – would	Poor
and presentation	board paper	management	need fixing.	
_	quality.	paper.	_	
Focus	All content to	a little	noticeable	Didn't address
	the point &	extraneous	irrelevant	the case
	relevant	material	material	

specification

or too long

	What was delivered:	
A	A quality of learning and	Shows insight, has reflected on the case, understands
	understanding that is the best	the implications of using a particular technology, has
	that could reasonably be	critically evaluated the case using acceptable analysis
	expected in this course.	strategies. Has developed a convincing approach to the
		topic.
В	Highly satisfactory	Has described the technologies, illustrated their use,
	but lacks the flair that	has shown some understanding of the business issues
	distinguishes A	and their justification, but not to the level for an A.
C	Quite satisfactory	Has made good attempt at the assignment, but has not
	but not of the same standard	demonstrated real insight of the consequences or
	as a B.	problems of using a particular philosophy. Justification
		not convincing to management.
D	Minimally Acceptable.	May have described some technologies but not shown
	at the lower end of what is	that they know how they link to a business case. Little
	acceptable from a Masters	or no reflection on how understanding issues and
	student.	analysing them might affect the business case.
F	Less than acceptable.	Below the standard expected from a 300 level student.