TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

School of Information Management

INFO325 - TELECOMMUNICATIONS IN BUSINESS

Trimester One 2012

COURSE OUTLINE

Names and Contact Details

Lecturer:	Senior Tutor:
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Office hours: by (email) arrangement and 3:30-4:30pm Monday and Wednesday	Office hours: See Blackboard

Trimester Dates

Teaching Period: Monday 5 March – Friday 8 June
First Lecture **Monday 5th March, 2:40pm RH LT3**
Study Period: Monday 11 June – Thursday 14 June
Examination Period: Friday 15 June – Wednesday 4 July (inclusive)

Note: We do not know exactly when our exam will be held until well into the trimester. You should plan to be available for the entire exam period until the exam schedule is available.

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 16 March 2012.

2. The standard last date for withdrawal from this course is Friday 18 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 Number:
Lectures: RH LT3, Monday and Wednesday 2:40 – 3:30pm

Tutorials: 1 hour weekly tutorials will begin in week 2 until Week 12. Sign up information will be available on Blackboard in Week 1.

Course Content

Week	Date	Class	Topic	Assessment	Reading
1	5 Mar	L1	Communications signals, bandwidth, Digital and analogue.		Ch2; p.33-64
			No tutorials this week – sign up for a tutorial group		
	7 Mar	L2	OSI and TCP/IP stacks		Ch1; p.15-27
2	12 Mar	L3	Networks – LAN/WAN		Ch8; p.239-269
		T1	TCP/IP	Tutorial notes 1	
	14 Mar	L4	The Internet		Ch10; p.307-344
3	19 Mar	L5	Names and numbers		Ch10; p.322 - 326
		T2	Networks and the Internet	Tutorial notes 2	
	21 Mar	L6	Standards and Treaties		On Blackboard
4	26 Mar	L7	Network Neutrality		On Blackboard
		T3	Names and numbers	Tutorial notes 3	
	28 Mar	L8	Social and New Media		On Blackboard
5	2 April	L9	Cellular Radio		Ch3; p.90-94
		T4	Network Neutrality	Hand in Tutorial notes 1 - 4	
	4 Apr	L10	Wi-Fi (802.11)	Essay Due 3:20pm	Ch7; p.220-224
			Mid Term Break		
6	23 Apr	L11	PSTN/POTS		Ch11; p.351-380
		T5	Messaging	Tutorial notes 5	
	25 Apr		**ANZAC Day**		
7	30 Apr	L12	VOIP		Ch10; p.333-337
		T6	PSTN	Tutorial notes 6	
	2 May	L13	Convergence		Ch11; p.374-380
8	7 May	L14	Open Access/ Monetisation		
		T7	Convergence	Tutorial notes 7	
	9 May	L15	International data carriers		
9	14 May	L16	Mobility and connectedness	**Guest Speaker**	
		T8	Open Access	Tutorial notes 8	
	16 May	L17	Sensor and short range networks		
10	21 May	L18	4G		
		T9	Mobility	Tutorial notes 9	
	23 May	L19	Web2.0		
11	28 May		NRENs		
		T10	Wrap up tutorial	Hand-in tutorial notes 1 - 10	
	30 May	L21	Security	Business Case due 3:20pm	Ch12; p.387-424
12	4 Jun		**Queens Birthday**		
			No tutorials		
	6 Jun	L22	Revision		

This course explores telecommunications in business as it applies to the New Zealand perspective in 2012. The topics and technologies are introduced and discussed in lectures and followed up during tutorial classes. Students are expected to follow up the material with personal learning strategies such as: reading widely, exploring online materials, and carrying out personal supplementary research associated with the assignment topics.

Key concepts of modern telecommunications are introduced early and used later in the course to discuss the nation's current and proposed telecommunications infrastructure and how it is used by society. This provides students with the understanding necessary to critically examine the commercial, social and organisational applications of evolving telecommunications.

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 businesses today.	LG1	MA2,MA3
2	Analyse from a commercial perspective an extensive range of telecommunication technologies and solutions identifying advantages and limitations.	LG1	MA1,MA2
3	Analyse from a commercial perspective proposed standards that could influence the way businesses conduct business.	LG3	MA5,MA7
4	Identify emerging technologies that allow connectivity anytime anywhere.	LG1	MA4
5	Describe and discuss key factors impacting on adoption and take-up of telecommunication technologies and solutions.	LG3	MA4,MA2
6	Summarise and discuss key managerial and organisational issues surrounding telecommunications in business.	LG4	MA6,MA2, MA1

Course Delivery
- The course is delivered via lectures and tutorials – both are equally important to your learning. The assigned readings and your personal learning effort is also a vital part of the course and should not be ignored either. There may be quizzes in class that you will need to have done the reading to participate in. Materials posted on Blackboard are designed to supplement classes; you cannot count on Blackboard for a complete view of what is going on in the course.

Lectures:
- Face to face lectures are the primary delivery medium for introducing and framing the topics in this course.
- Topics that arise from in class discussion are also an important 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 often forms part of our class 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 should not be thought of as a replacement for your own personal learning strategy.

Tutorials:
- Tutorials for INFO325 have two important functions:
    1. To provide a supplemental discussion forum for 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.

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
- **Data Communications and Computer Networks 6/e** by White, Curt M. ISBN: 978-0-538-45261-8
- Supplemental readings and links will be posted on Blackboard.
- Students are also expected to follow the news media for materials and announcements related to ultra-fast broadband and telecommunications market developments.

Assessment Requirements

Assessment item	Date	Objective tested	Percentage
Essay (2000 words)	3:20pm 4 April	1,2,3,4	20%
Business Case (2000 words)	3:20pm 30 May	2,3,5	20%
Tutorial notes.	Prepare a set of topic notes that forms a useful future reference pack.	1,4,6	10%
Tutorial participation.	Attend and participate in six out of ten tutorials.	All	10%
Final Examination (2 Hour exam)	As announced in the examination timetable.	All	40%

Quality Assurance Note

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 15 June – Wednesday 4 July (inclusive).

Penalties

- The penalties for late submission of work without a prior extension arrangement are a reduction of 10% of the available marks per calendar day late. For example; an assignment handed in a day late can only achieve 90% of the available marks, maximum. And so on for each subsequent day, so at 10 days late there are no possible marks left for the assignment.
- Conflicting workload is not a reason for giving extensions, the assignment topics are given out early and there is plenty of opportunity to get started.
- For work that exceeds the word limits (a tolerance of 10% is acceptable) only be assessed up to the word limit and extra material will be ignored.

Mandatory Course Requirements

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

You are required to <u>attend at least six out of the ten available tutorials</u>.

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. 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

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine http://www.turnitin.com Turnitin is an on-line plagiarism prevention tool which compares submitted work with a very large database of existing material. 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.

Please include the following material:

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
http://www.victoria.ac.nz/home/study/academic-progress.aspx
The University's statutes and policies are available at www.victoria.ac.nz/home/about/policy,
except qualification statutes, which are available via the Calendar webpage at
http://www.victoria.ac.nz/home/study/calendar.aspx (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
http://www.victoria.ac.nz/fca/studenthelp/

Te Putahi Atawhai
Maori and Pacific Mentoring Programme
http://www.victoria.ac.nz/tpa/

MARKING RUBRIC for essay assignment.

<u>Academic Essay.</u>
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 deploying fibre infrastructure in Wellington.
- Discuss the social and economic benefits and potential impacts of UFB adoption to New Zealand.
- Discuss the demand profile for UFB adoption in fibre to the home.
- Contrast New Zealand's plans with Australia's current plans.
- Describe and discuss the role open access networks.
- Discuss rural broadband adoption in New Zealand; offer some suggestions about how this can be made affordable.

3000 words (<u>max</u>, this is not a target), properly APA referenced (25%)

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

topic				
Focus	All content to the point & relevant	a little extraneous material	noticeable irrelevant material	Didn't answer the question
Presentation	Excellent	Good	OK	Poor
APA citation	Exact	Minor Inconsistencies	Incorrect formatting	Not used
Essay Format	Structured	Bit wandering	confused	Messy
Word Count	As required		outside the specification	much too short or too long

What was delivered:		
A	A quality of learning and understanding that is the best that could reasonably be expected in this course.	Shows insight, has reflected on their personal learning strategies, understands the implications of using a particular philosophy, has critically evaluated their learning. Has presented their personal approach to their topic.
B	Highly satisfactory but lacks the flair that distinguishes A	Has described the technology, how they are used, has shown some understanding of the economic and social issues and their justification, but not to the level for an A.
C	Quite satisfactory but not of the same standard as a B.	Has made good attempt at the assignment, but has not demonstrated real insight about the consequences or problems of the UFB plans. Justification may not be explicitly shown.
D	Minimally Acceptable. At the lower end of what is acceptable from a 3rd year student.	May have described some technologies but not shown that they know how to apply them. Little or no reflection on how knowledge of UFB might affect their approach to their understanding of the topic.
F	Less than acceptable.	Below the standard expected from a 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	B	C	D
Discussion of key technology issues	Clearly articulated in correct language	Described, but not targeted correctly	Minimal description	Not mentioned
Convincing depth of business analysis	Insightful	Adequate	Minimal coverage of key issues	Unconvincing
Business benefits discussed	Multiple	Two	One	None
Relevance of benefits to case.	Comprehensive	Adequate	Few	Minimal
Understanding of Benefit realisation	Shows clear understanding	Some appreciation	Surface use only	Doesn't
Actively engaged with	Excellent use	Good discussion	Some understanding	No real understanding
Use of stakeholder analysis	Shows clear understanding	Some appreciation	Surface use only	Doesn't
Originality	Shows independent thought	some new ideas	derivative	copied
Convincing business case	Logical Flow	Understandable	Hit and miss	Confused
Professionalism and presentation	Excellent – of board paper quality.	Good management paper.	OK – would need fixing.	Poor
Focus	All content to the point & relevant	a little extraneous material	noticeable irrelevant material	Didn't address the case
Word Count	As required		outside the specification	much too short or too long

	What was delivered:	
A	A quality of learning and understanding that is the best that could reasonably be expected in this course.	Shows insight, has reflected on the case, understands the implications of using a particular technology, and has critically evaluated the case using acceptable analysis strategies. Has developed a convincing approach to the topic.
B	Highly satisfactory but lacks the flair that distinguishes A	Has described the technologies, illustrated their use, has shown some understanding of the business issues and their justification, but not to the level for an A.
C	Quite satisfactory but not of the same standard as a B.	Has made good attempt at the assignment, but has not demonstrated real insight of the consequences or problems of using a particular philosophy. Justification not convincing to management.
D	Minimally Acceptable. At the lower end of what is acceptable from a 3rd year student.	May have described some technologies but not shown that they know how they link to a business case. Little or no reflection on how understanding issues and analysing them might affect the business case.
F	Less than acceptable.	Below the standard expected from a 300 level student.