SISAT School of Information Systems & Technology Faculty of Informatics

IACT302 Corporate Network Management Subject Outline Autumn Session 2009

Head of School – Associate Professor Peter Hyland, Student Resource Centre, Tel: (02) 4221 3606

GENERAL INFORMATION

Subject Coordinator Telephone Number: Email: Location:	Penney McFarlane 4221 4864 penney@uow.edu.au 39.115	
Ms McFarlane's consultation times during session:		
Day	Time	
Tuesday	2.30 - 4.30	
Thursday	10.30 - 12.30	
Subject Organisation		
Session:	Autumn Session, Wollongong Campus	
Credit Points	6 credit points	
Contact hours per week:	2 hours lectures, 1 hour tut	
Lecture Times & Location:	Monday 1.30-3.30 PM 35.G20	
Tutorial Day, Time and Location can be found at:	http://www.uow.edu.au/student/timetables/index.html	

Students should check the subject's web site regularly as important information, including details of unavoidable changes in assessment requirements will be posted from time to time via e-Learning space http://www.uow.edu.au/student/lol. Any information posted to the web site is deemed to have been notified to all students.

Subject Description

This subject explores telecommunications network planning from a strategic perspective. Topics covered will include: (1) Fundamental Networking Concepts: standards, protocols, architectures and technologies (2) Fundamental Data Networking Concepts: network topologies, network devices, wireless networking, security and applications (3) Fundamental Voice Networking Concepts: history, network classifications, the telephone system and voice communications, architectures, cellular networks (4) Convergence Of Voice And Data In Telecommunications: frame/cell relay, broadband networks, emerging technologies.

Subject Objectives

A student who successfully completes this subject should be able to: 1. explain the principles of telecommunications network architecture and standards; 2. debate the current status and future directions of telecommunications networks; 3. evaluate the critical planning issues and the options created by new technology; 4. develop a telecommunications network plan; and, 5. critically analyse the need for culture and social considerations in telecommunications planning.

Graduate Qualities

This subject will continue to the following graduate qualities: -Informed -Independent Learners -Problem Solvers -Effective Communicators -Responsible -Team Work Further information can be found at: http://www.uow.edu.au/informatics/sisat/current/SubjectInformation/UOW051055.html

Attendance Requirements:

It is the responsibility of students to attend all lectures/tutorials/labs/seminars/ practical work for subjects for which you are enrolled. It should be noted that the amount of time spent on each 6 credit point subject should be at least 12 hours per week, which includes lectures/tutorials/labs etc.

Satisfactory attendance is deemed by the University, to be attendance <u>at approximately 80%</u> of the allocated contact hours.

Tutorials will commence in week three (3) and continue until week thirteen (13). Attendance rolls will be kept for tutorials. If you are present for less than 80% and would have otherwise passed you need to apply for student academic consideration, otherwise a TF (technical fail) grade will be recorded.

Students MUST attend their **allocated** tutorial unless they have the written permission of the subject coordinator.

Method of Presentation:

In order to maximize learning outcomes, it is strongly recommended that students attend all lectures.

This subject will be delivered in face to face mode. It is not available in distance education mode. The availability of lectures notes and other course materials online is NOT a substitute for attendance at lectures. Students should note that additional examinable material will be presented during lectures that will not be in the online course content.

Week	Lecture Topic		Tutorial Activity	Assessment	Reading
	Main Topic	Subtopic			
1	Administration	Introduction, Essay Writing and Allocation of	No Tutorial	Essay Handout in Lecture	ТВА
		Essay Topics			
2	Strategic Planning Overview	Introduction to Course Themes The Need for Network Planning	No Tutorial		
3	Strategic Planning- Timeframe 1	Frameworks and Processes Business impacts	Seminar discussion & allocation		
4	Strategic Planning- Timeframe 2	Network Protocols A-S	Sample Milestone Activity	Essay Due in tutorial	
5	Strategic Planning- Timeframe 2	Network Protocols N-L	Milestone Activity One		
6	Strategic Planning- Timeframe 2	Typologies and Architectures	Seminars 1 & 2	Group Project Handout	
	Session Break				
7	Strategic Planning- Timeframe 3	Quality of Service and Network Management	Seminars 3 & 4		
8	Anzac Day Public Holiday	No lecture	Milestone Activity Two		
9	Bringing it together	What's in a Strategic Network Plan?	Seminars 5 & 6		
10	Bringing it all together	Planning for changes in technology	Seminars 7 & 8		
11	Bringing it all together.	Planning for changes in organisations	Milestone Activity 3		Group Project Due In Tutorial
12	Evolving Future Strategies	Flow Economy: strategies for next generation content distribution	Seminars 9 & 10		
13	Conclusion	Subject Review	Seminars 11 & 12		

Lecture Schedule: A proposed* Lecture schedule for the subject is as follows:

Changes to the above schedule will be posted via e-Learning space http://www.uow.edu.au/student/lol. Any information posted to the web site is deemed to have been notified to all students.

Subject Materials:

Any readings/references are recommended only and are not intended to be an exhaustive list. Students are encouraged to use the library catalogue and databases to locate additional readings

Textbook(s):

Management of Information Technology, Frenzel & Frenzel, Thompson Pub. ISBN:0-619-03417-3

Other Resources:

Recommended References.

- Dawson, R., *Living Networks: Leading Your Company, Customers, and Partners in the Hyper-Connected Economy*. First ed. 2003: Financial Times; Prentice Hall. (Available online through Safari Tech Books Online http://proquest.safaribooksonline.com/0130353337) Available in the unicentre bookshop for \$49.95
- Devaraj, S and Kohli, R, *The IT payoff : measuring the business value of information technology investments*, 2003: Financial Times; Prentice Hall. (Available online through Safari Tech Books Online http://proquest.safaribooksonline.com/0130650749), Available in the library (call No: 658.15/395)
- 3. Harris, K, *Building the New Enterprise People, Processes and Technology*, Sun Microsystems Press, Prentice Hall, 1998, Available in the library (call No: 658.4038/315)
- 4. Kurose, J. and Ross, K. *Computer Networking: a top-down approach featuring the Internet*, 3rd edition, 2005, Addison Wesley, Sydney.
- 5. McCabe, J.D., *Network Analysis, Architecture and Design.* Second ed., Morgan Kaufmann, 2003, Available in the unicentre bookshop for \$143.89, Available in the library (call No: 004.65/24)
- 6. Panko, R., *Business Data Networks and Telecommunications*, 6e; ISBN: 0132214415; Pearson Education Australia; 2006
- 7. Terplan, K. *Communications Networks Management (2nd ed.)*, Prentice Hall, 1992, Available in the library (call No: 004.6068/3)
- 8. Rowe, S., *Telecommunications for Managers (3rd ed or later.)*, Prentice Hall, 1995, Available in the library (call No: 651.7/10)
- 9. Davidow, W.H., and Malone, S., *The Virtual Corporation*, Harper Business, 1992, Available in the library (call No: 658.5/161)
- 10. McClaren, S., Easy Writer: A students Guide to Writing Essays & Reports. First ed., Pascal Press, Available in the library (call No: 808.042/158)

Assessment:

ASSESSMENT ITEMS & FORMAT	% OF FINAL MARK	GROUP/ INDIVIDUAL	DUE DATE
2500 Word Essay *	10%	Individual	See Notes on Assessment.
Seminar	15%	Pairs	Oral presentation and hard copy of summary sheet during tutorial classes. See Notes on Assessment.
Milestone activities and quizzes	15%	Individual	Hard copy during tutorials. See Notes on Assessment.
Group component of major project *	20%	Group	Hard copy during tutorial class. See Notes on Assessment.
Formal Exam	40%	Individual	Exam Period

This subject has the following assessment components.

Notes on Assessment:

All assignments are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assignment.

*The essay and group project are to be submitted at midnight prior to the scheduled tutorial day via e-learning. Hard copy will be handed in during tutorials.

Group assessment tasks need to specify the individual's contribution to the task as a whole.

Submission of Assessment Items

- If you cannot submit an assessment item on time it must be submitted to the subject coordinator as soon as possible. Late submission of assessment item MUST be accompanied by a student academic consideration request via SOLs
- All submissions must be accompanied by an Assignment Cover Sheet. This is available in hard copy from the student enquiry centre in building three or online at http://www.itacs.uow.edu.au/info/current/coversheet.pdf

Participation

- Students are required to participate in tutorials.
 - This means not only attending and listening to the tutorial presentations, but contributing insights to the discussion.

Special Assessment Requirements:

As part of their tutorial activities, students will be required to complete milestone activities during the tutorial and participate in specified group projects.

All written work will be graded with the following criteria in mind:

- 1. The extent to which the question has been correctly interpreted and answered;
- 2. Originality;
- 3. Demonstrated understanding of the main concepts of the course;
- 4. Awareness of the literature;
- 5. Clarity and structure of written work
- 6. The level of communications skills demonstrated.

Electronic Submission of Assessment Items:

Unless otherwise notified by the subject coordinator, all written assignments must be submitted electronically.

Submission of assessment items via email will not be accepted unless directed to do so by the subject coordinator.

To be eligible for a Pass in this subject a student must achieve a mark of at least 40% in the final exam. Students who fail to achieve this minimum mark & would have otherwise passed will be given a TF (Technical Fail) for this subject.

Procedures for the return of assessment items:

- All assignments except the major project will be returned to students in tutorials.
- The major project will be available from the subject coordinator after being marked.

Penalties for late submission of assessment items:

Penalties apply to all late work, except if student academic consideration has been granted. Late submissions will attract a penalty of 10% per day of the assessment mark. This amount is per day including weekends.

Work more than 5 days late will be awarded a mark of zero.

- Penalties will apply to all late work, except if student academic consideration is deemed necessary or unless an extension has been granted by your subject coordinator or your tutor.
- Requests for extensions should be emailed to the tutor, lecturer or coordinator, **prior** to the due date.

Assessment Tasks

Essay

The Essay assignment will be handed out during the week one lecture. If you do not attend the first week's lecture then it is YOUR responsibility to collect the assignment sheet from the lecturer during scheduled consultation times.

The Marking criteria for the essay will focus on:

Introduction;

Does the introduction formally describe the problem and how the essay will respond to this problem?

Development of Ideas;

What ideas have been identified as important? Are they linked together in a way that responds to the problem and makes sense?

Communication of Ideas:

Essay structure, paragraph structure, logical development of argument, spelling, grammar etc

Validity

Is your essay a reliable contribution to the body of knowledge on this topic? Can it be used in research? Does it conform to University acknowledgment practice?

Formalities

Referencing practice, bibliography, presentation (including neatness, legibility, layout, general appearance) and length

Seminars

Seminars will be presented to the class as a SEMINAR PRESENTATION in pairs. Both students are expected to take an active part in the presentation. Each pair will give a talk to the class on their topic for an absolute maximum of twenty (20) minutes. It is expected that most presentations will take fifteen (15) minutes plus up to five (5) minutes for questions and discussions. If students wish to experiment with a podcast, video presentation or other AV based seminar of their topic, please consult with subject coordinator as soon as the topic allocation has been made.

Seminar topics and pairings will be allocated in your first tutorial in week three (3).

Topics will be **RANDOMLY** assigned to students by the lecturer. Students may **NOT** choose their own topic; students cannot swap or change topics for any reason.

There will be two (2) student topics presented in each seminar tutorial hour. They will occur in TOPIC ORDER ... i.e.: if you draw topic number 1, you will be the first pair to present, if you draw topic number 12, you will be the last one. This is why they **MUST** be random allocations.

The seminar is worth 15% of your final grade and the mark will comprise two parts.

- 1. Students are required to submit a one page (maximum) summary of their seminar presentation prior to the presentation. This will be worth five (5) marks.
- 2. The tutor will give a mark out of ten (10) based upon the following criteria
 - Relevance and coverage: Is the content relevant? i.e. has the student prepared the correct subject and established the correct focus? This is important, as (just as in an essay) it is important that your presentation tackles the issue that you were given to tackle.
 - Discussion of Topic/Intellectual stimulus: how interesting was it? Did the presentation "flow"?
 - Clarity of presentation: was there a clear structure and logic which you could follow?

- Audibility and clarity of speech: could you follow what was said? How clearly has the student delivered their presentation? –Part of the skills training aspect of presentations is to encourage students to speak fluently and confidently in public.
- Use of audiovisual aids: e.g. handout, whiteboard, PowerPoint was this appropriate and effective? How well have students prepared and handled their chosen technology: did they arrange slides well? Was the choice of colour appropriate? If they prepared a handout, was it clear and helpful?
- Acknowledgement/References: Have sources been acknowledged in the presentation or handout? (this is important, because your presentation should give pointers to other students as to useful bibliography on a subject)
- Timekeeping: How well have students kept time? Was the presentation balanced in terms of time.
- Response to questions: How well did the student respond to questions?

It is expected that every student will participate by attending tutorials, listening to EVERY presentation and by asking appropriate questions. It should be noted that seminar presentation material is examinable.

Tutorial/Lab Closure Policy

If for any reason, the number of students in a tutorial or lab falls below a sustainable enrolment level, as determined by the Head of School, tutorials/labs offered for that subject may be collapsed or deleted.

You will have to attend the new tutorials/lab if this closure affects the one you are attending. We will endeavour to make this decision no later than Week 4 of session.

Supplementary Exams

Supplementary Exams will be dealt with in accordance with student academic consideration policy (http://www.uow.edu.au/about/policy/studentacademicconsiderationpolicy.pdf) 6.2 Timing of Supplementary Exams.

While the School normally grants supplementary exams when the student does not sit the standard exam for an acceptable reason, each case will be assessed on its own merit and there is no guarantee a supplementary exam will be granted. If a supplementary exam is granted, you will normally be notified via SOLS Mail the time and date of this supplementary exam. You must follow the instructions given in the email message.

Please note that if this is your <u>last</u> session and you are granted a supplementary exam, be aware that your results will not be processed in time to meet the graduation deadline.

Student Academic Consideration Policy

The School recognises that it has a responsibility to ensure equity and consistency across its subjects for all students. Sometimes, in exceptional circumstances, students need to apply for student academic consideration in order to complete all assessable work.

The University applies strict criteria to the granting of student academic consideration. Before applying for student academic consideration, students should carefully read the University's policy which can be found at: http://www.uow.edu.au/about/policy/studentacademicconsiderationpolicy.pdf.

Plagiarism

When you submit an assessment task, you are declaring the following

- 1. It is your own work and you did not collaborate with or copy from others.
- 2. You have read and understand your responsibilities under the University of Wollongong's policy on plagiarism.
- 3. You have not plagiarised from published work (including the internet). Where you have used the work from others, you have referenced it in the text and provided a reference list at the end ot the assignment.

Students must remember that:

Plagiarism will not be tolerated.

Students are responsible for submitting original work for assessment, without plagiarising or cheating, abiding by the University's policies on Plargiarism as set out in the University Handbook under University Policy Directory and in Faculty handbooks and subject guides. Plagiarism has led to the expulsion from the University.

Student Academic Grievance Policy

The School aims to provide a fair, equitable and productive learning environment for all its students. The Student Academic Grievance Policy seeks to support the achievement of this goal by providing a transparent and consistent process for resolving student academic grievances.

Any student who has a grievance over a result should obtain a Faculty of Informatics Appeal Against Decision or Action Affecting Academic Experience form from the Informatics Student Enquiry Centre. (http://www.uow.edu.au/content/groups/public/@web/@inf/@faculty/documents/doc/uow017433.pdf) The student should firstly take the form to the marker/lecturer to discuss the matter and, if the student is still not satisfied, s/he should take the next step as outlined on the form.

Once the grievance has been considered by the Faculty, if the student still feels the situation has not been fully resolved s/he may consult the Dean of Students. However, the Dean of Students can have no input into the academic judgment of the lecturer and can only review the grievance to ensure proper procedure has been followed.

Relevant University Policies, procedures and students services:

For more information students must refer to the Faculty handbook, online references or consult the UOW policy in full at http://www.uow.edu.au/handbook/courserules/studacgrievpol.html which contains a range of policies on educational issues and student matters.

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Code of Practice - Teaching and Assessment	Code of Practice - Students
http://www.uow.edu.au/handbook/codesofprac/teaching_code.p	http://www.uow.edu.au/handbook/codesofprac/cop_students.ht
df	ml
Code of Practice-Honours	Acknowledgement Practice Plagiarism will not be tolerated:
http://www.uow.edu.au/handbook/CodeofPractice-Honours.pdf	http://www.uow.edu.au/handbook/courserules/plagiarism.html
Key Dates	Student Academic Consideration Policy:
http://www.uow.edu.au/student/dates.html	http://www.uow.edu.au/about/policy/studentacademicconsiderat
	ionpolicy.pdf
Course Progress Requirements:	Graduate Qualities Policy:
http://www.uow.edu.au/student/mrp/index.html	http://www.uow.edu.au/about/teaching/qualities/index.html# T
	he new UOW
Academic Grievance Policy (Coursework and honours students)	Non-Discriminatory Language Practice and Presentation
http://www.uow.edu.au/handbook/courserules/studacgrievpol.ht	http://staff.uow.edu.au/eed/nondiscrimlanguage.html
ml	
Occupational Health and Safety	Ownership of Work & Intellectual Property Policy:
http://www.uow.edu.au/about/policy/ohs.html	http://www.uow.edu.au/handbook/generalcourserules/UOW028
	651.html
Human Research Ethics Committee:	Rules for student conduct:
http://www.uow.edu.au/research/rso/ethics/human/	http://www.uow.edu.au/handbook/generalrules/StudentConduct
	Rules.pdf
Information Learners Introductory Program	Informatics Faculty Librarian, Ms Annette Meldrum, phone:
http://www.uow.edu.au/student/attributes/ilip/	4221 4637, email: ameldrum@uow.edu.au
Student Support Services:	SISAT Internet Access & Student Resource Centre
http://www.uow.edu.au/student/services/	http://www.uow.edu.au/informatics/sisat/current/uow024466.ht
Informatics Faculty SEDLO (Student Equity and Diversity	ml
Liaison Officers) Virginie Schmelitschek, phone 4221 3833,	
virginie@uow.edu.au	
SISAT Computer Usage Rules	SISAT Subject Outlines
http://www.uow.edu.au/informatics/sisat/current/uow024457.ht	http://www.uow.edu.au/informatics/sisat/current/UOW041925.
ml	html

This outline should be read in conjunction with the following documents: