GENERAL INFORMATION

Subject Coordinator: Mr Will Tibben
Telephone Number: 4221 3768
Email: wjt@uow.edu.au
Location: 39.110

Mr Tibben’s consultation times during session:
Day: Time
Tuesday: 14.30-16.30
Wednesday: 10.30-12.30

Subject Organisation:
Session: Spring Session, Wollongong Campus
Credit Points: 6 credit points
Contact hours per week: 2hr Lecture, 1 hr Tut
Lecture Times & Location: Wednesday 15.30 – 17.30 & 35.G45
Tutorial Day, Time and Location can be found at: http://www.uow.edu.au/student/sols/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.

Content

The subject investigates the design and implementation of a telecommunications network plan. Topics to be covered include (1) The Need for Planning and the Planning Process: planning teams, strategic planning, the network plan, security planning and implementation planning. (2) The Design Process: design teams, translating the plan into design criteria, requirements capture and specification, design requirements and criteria, choosing topographies and architectures, evaluating plans (3) The Implementation Process: implementation teams, validating implementation plans, managing people and technology, managing the implementation process.

Objectives

A student who successfully completes this subject should be able to 1. Explain the principles of telecommunications network traffic flow control, forecasting, dimensioning and security; 2. Debate the current status and future directions of telecommunications networks as a complex interrelated set of operations; 3. Evaluate the critical forecasting, long range planning issues and appropriate project management techniques; 4. Critically analyse the telecommunications network plan for a large organisation. 5. Identify design criteria and implementation choices for a large telecommunications network. 6. Critically analyse the implementation plan for a telecommunications network for a large organisation.
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

Tutorials will commence in week two (2) and continue until week thirteen (13). Satisfactory attendance at lectures, tutorials and seminars is a requirement for the successful completion of this subject. Failure to comply may result in a fail grade being recorded. Satisfactory attendance is deemed to be attendance at approximately 80% of the allocated contact hours. If you miss a tutorial for legitimate reasons you must apply for special consideration through SOLs and contact the subject coordinator as soon as possible if alternative arrangements are required.

Signed rolls will be used to ascertain attendance at tutorials. It is YOUR responsibility to sign rolls each week. Attendance rolls may not be signed outside of your allocated tutorial time. Students MUST attend their allocated tutorial unless they have the written permission of the subject coordinator.

Method of Presentation
A proposed Lecture schedule for the subject is as follows:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Tutorial Activity</th>
<th>Reading</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction and Subject Overview</td>
<td>NO TUTORIAL</td>
<td>Subject Outline; Chapter One</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Planning Teams and Strategic Planning</td>
<td>Essay Workshop</td>
<td></td>
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<tr>
<td>3</td>
<td>Requirements Analysis: Concepts</td>
<td>Seminar Allocation. Group Formation</td>
<td>Chapter Two</td>
<td>Seminar Questions allocated and handed out in Tutorials</td>
</tr>
<tr>
<td>4</td>
<td>Requirements Analysis: Process</td>
<td>Milestone Activity One</td>
<td>Chapter Three</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Flow Analysis</td>
<td>Seminars 1 - 2</td>
<td>Chapter Four</td>
<td>Essay to be submitted Friday 23.59 on TurnItIn</td>
</tr>
<tr>
<td>6</td>
<td>Design Teams and Translating the Plan into Design Criteria</td>
<td>Milestone Activity Two</td>
<td></td>
<td>Hardcopy of essay due in Tutorials</td>
</tr>
<tr>
<td>7</td>
<td>Network Architecture</td>
<td>Seminars 3 - 4</td>
<td>Chapter Five</td>
<td>Major Project handed out in Lecture</td>
</tr>
<tr>
<td>8</td>
<td>Addressing and Routing Architecture</td>
<td>Milestone Activity Three</td>
<td>Chapter Six</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Network Management Architecture and Performance Architecture</td>
<td>Seminars 5 - 6</td>
<td>Chapters Seven and Eight</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Security and Privacy Architecture</td>
<td>Milestone Activity Four</td>
<td>Chapter Nine</td>
<td></td>
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<tr>
<td>11</td>
<td>Selecting Technologies for the Network</td>
<td>Seminars 7 - 8</td>
<td>Chapter Ten</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Interconnecting Technologies Within the Network Design</td>
<td>Seminars 9 - 10</td>
<td>Chapter Eleven</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Implementation Teams and Plan Validation Subject Review</td>
<td>Seminars 11 -12</td>
<td></td>
<td>Major Project Due in Tutorials</td>
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</tbody>
</table>

Subject Materials
These 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. These may be available from UniCentre Bookshop.
Textbooks:

Other useful references

Assessment
This subject has the following assessment components.

<table>
<thead>
<tr>
<th>Assessment Items &amp; Format</th>
<th>Percentage of Final Mark</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam (Individual)</td>
<td>40%</td>
<td>Exam Period</td>
</tr>
<tr>
<td>2000 Word Essay (Individual)</td>
<td>10%</td>
<td>Submit electronically to TurnItIn by 23:59 Friday, week five. Hard copy to be submitted during week six tutorial class</td>
</tr>
<tr>
<td>Seminar (Group)</td>
<td>10%</td>
<td>Oral presentation and hard copy of summary sheet during tutorial classes weeks 5, 7, 9, 11, 12, 13</td>
</tr>
<tr>
<td>Milestone activities leading to major project (Individual)</td>
<td>20%</td>
<td>Hard copy during tutorials in weeks 4, 6, 8 &amp; 10</td>
</tr>
<tr>
<td>Major project (Group)</td>
<td>20%</td>
<td>Hard Copy during week 13 tutorials</td>
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Notes on Assessment
Unless otherwise notified by the subject coordinator, all written assignments must be submitted electronically. All assignments are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assignment.

Submission of Assessment Items
- All assessment work is to be submitted during your allocated tutorial.
- If you cannot submit an assessment item during your tutorial then it must be submitted to the subject coordinator as soon as possible. Late submission of assessment item MUST be accompanied by a special consideration item 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/SISAT_cover_sheet.pdf

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 may apply to all late work, except if special consideration is deemed necessary or unless an extension has been granted by your subject coordinator. Your tutor cannot grant you an extension.
- Requests for extensions should be emailed to the lecturer or coordinator, prior to the due date.
- 10% of available marks may be deducted from work for each day it is overdue. Work more than one week late may be awarded a mark of zero.

Electronic submission of Assessment Items
- Electronic submission is via TurnItIn as detailed in Assessment Task below..
Participation

- Students are required to participate in tutorials. This means not only attending and listening to the tutorial presentations, but contributing information 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 the 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 and oral presentations
6. The level of communications skills demonstrated.

Assessment Tasks

Essay

The essay is designed to develop an understanding of academic referencing and its place in producing technical reports. The final version in MS Word, Text or pdf format of your essay is to be submitted to the “Turnitin” text matching system available at www.turnitin.com by 23:59, Friday week 5. A hard copy of the essay is to be submitted during tutorials in week six. Plagiarism may result in a zero mark.

Seminars

Seminar topics and pairings will be allocated in tutorial of week three (3). Seminar topics are RANDOMLY assigned to students by the lecturer. These 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.

There will be two (2) student topics presented in each seminar tutorial hour. They will occur in TOPIC ORDER … ie: 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.

Major Project

The Major Project focuses on a contemporary issue in corporate network design and implementation. Students will be required to structure their report along the lines outlined in the text book. Each group member will be held accountable for their contribution which will be reflected in the final mark awarded for this assessment item.

Special 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 special consideration in order to complete all assessable work.

The University applies strict criteria to the granting of special consideration. Before applying for special consideration students should carefully read the University’s policy. The policy can be found at: http://www.uow.edu.au/handbook/courserules/specialconsideration.html

As an example: If a student requires an extension of time for the completion of an assignment this may be granted in certain circumstances. A request for an extension must be made to the Subject Coordinator via SOLs before the due date.

Scaling

Final results in this subject may be scaled. The scaling method that will be used in this subject is as follows.

If E is the student exam mark, and A is the student assignment mark, the student final mark will be determined as follows:

if $E \geq 40\%$ of the maximum exam mark: then student final mark is $E + A$;
if $35\% \leq E < 40\%$ of the maximum exam mark: then student final mark is $\min\{E+A, 47\}$

Satisfactory requirements

In order to achieve a satisfactory standard in the Essay task students must be able to demonstrate an understanding of academic writing techniques as outlined in the tutorial of week 2.

In order to achieve a satisfactory standard in the Seminar it is essential for students to demonstrate an awareness of contemporary issues and technologies.
As a final year subject students should approach the Major Project with a view of demonstrating the culmination of their skills and knowledge to date. To that extent the document should be suitable for a professional audience by demonstrating knowledge of contemporary issues and technologies. The structure and presentation of the report should reflect a high degree of coordination between team members.

**Additional Information**

Students must refer to the Faculty Handbook or online references which contain a range of policies on educational issues and student matters.

**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 of 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 last session and you are granted a supplementary exam, that your results will not be processed in time to meet the graduation deadline.

**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 of the assignment.
4. Plagiarism will not be tolerated.
5. Students are responsible for submitting original work for assessment, without plagiarising or cheating, abiding by the University’s policies on Plagiarism as set out in the Calendar under University Policies, 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 or [http://www.uow.edu.au/content/groups/public/@web/@inf/@faculty/documents/doc/uow017433.pdf](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 judgement of the lecturer and can only review the grievance to ensure proper procedure has been followed. For more information, please consult the UOW policy in full at: [http://www.uow.edu.au/handbook/courserules/studacgrievpol.html](http://www.uow.edu.au/handbook/courserules/studacgrievpol.html)

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

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<thead>
<tr>
<th>Code of Practice - Teaching and Assessment</th>
<th>Key Dates</th>
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<table>
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<tr>
<th>Code of Practice - Students</th>
<th>Information Literacies Introduction Program</th>
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<tr>
<th>Acknowledgement Practice Plagiarism will not be tolerated</th>
<th>Student Support Services:</th>
</tr>
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<tbody>
<tr>
<td>Informatics Faculty SEDLO (Student Equity and Diversity Liaison Officers) Virginie Schmelitschek, phone 4221 3833, <a href="mailto:virginie@uow.edu.au">virginie@uow.edu.au</a></td>
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<table>
<thead>
<tr>
<th>Code of Practice-Honours</th>
<th>Non-Discriminatory Language Practice and Presentation</th>
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| Informatics Faculty Librarian, Ms Annette Meldrum, phone: 4221 4637, ameldrum@uow.edu.au | |

This subject outline can be found at [http://www.itacs.uow.edu.au/current/subject_outlines](http://www.itacs.uow.edu.au/current/subject_outlines)
<table>
<thead>
<tr>
<th>Resource</th>
<th>Link</th>
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