# MMAN4010

Thesis A

Term Two // 2021

School of Mechanical and Manufacturing Engineering // UNSW Engineering

# Course Overview

## Staff Contact Details

### Convenors

| Name | Email | Availability | Location | Phone |
|---|---|---|---|---|
| Ang Liu | ang.liu@unsw.edu.au | | J17-408 | +61-2-93854080 |

### Demonstrators

| Name | Email | Availability | Location | Phone |
|---|---|---|---|---|
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| Muhammad Imran | muhammad.imran@unsw.edu.a | | | |

(+61 2) 9385 7661 – Engineering Industrial Training

(+61 2) 9385 3179 – UNSW Study Abroad and UNSW Exchange (for inbound students)

(+61 2) 9385 4097 – School Office**

**Please note that the School Office will not know when/if your course convenor is on campus or available

## Email

Engineering Student Support Services – current student enquiries

- e.g. enrolment, progression, clash requests, course issues or program-related queries

Engineering Industrial Training – Industrial training questions

UNSW Study Abroad – study abroad student enquiries (for inbound students)

UNSW Exchange – student exchange enquiries (for inbound students)

UNSW Future Students – potential student enquiries

- e.g. admissions, fees, programs, credit transfer

School Office – School general office administration enquiries

# Course Details

## Credit Points 6

## Summary of the Course

This course is the first of two parts and is undertaken before MMAN4020 Thesis B. The Thesis involves formulating the designs for and solutions to open-ended engineering problems. The problems will be drawn from contemporary practice and will be multi-disciplinary involving application of material learnt throughout the undergraduate program and will require creative thought. The course will include the preparation of relevant professional documents. Part A involves the formulation of a project proposal which includes a review of the relevant literature. The course will include the preparation of relevant professional documents.  Part B involves the satisfactory preparation and submission an individual thesis addressing the project plan defined in Thesis A.

Students should have passed 132 units at the time they commence this course.

## Course Aims

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This course enhances the student's skills for undertaking scholarly enquiry by attempting to achieve a specific topic objective within a defined period of time. A significant component of the course relates to the review of literature, which promotes independent and reflective learning as well as increases students' capacity to develop information literacy. The thesis is expected to reinforce the student's ability and confidence in the written communication of technical information.

## Course Learning Outcomes

After successfully completing this course, you should be able to:

| Learning Outcome | EA Stage 1 Competencies |
|---|---|
| 1. Conduct independent research and apply established theories to address an engineering problem that does not have a well-defined solution | PE2.3, PE2.4, PE3.1 |
| 2. Analyse critically, reflect on and synthesise complex information, problems, concepts and theories | PE1.3, PE1.4 |
| 3. Interpret and transmit knowledge, skills and ideas to specialist and no-specialist audiences | PE2.1, PE2.2 |
| 4. Demonstrate managerial skills and individual responsibility to complete a project within limited time and resources | PE3.2, PE3.4, PE3.5, PE3.6 |

## Teaching Strategies

The Thesis is where each student works under the guidance of academic staff with input from technical (industry/research/practitioner) specialists. Topics are related to projects selected from contemporary practice. The work involves research-based investigations, industrial problems and design applications.

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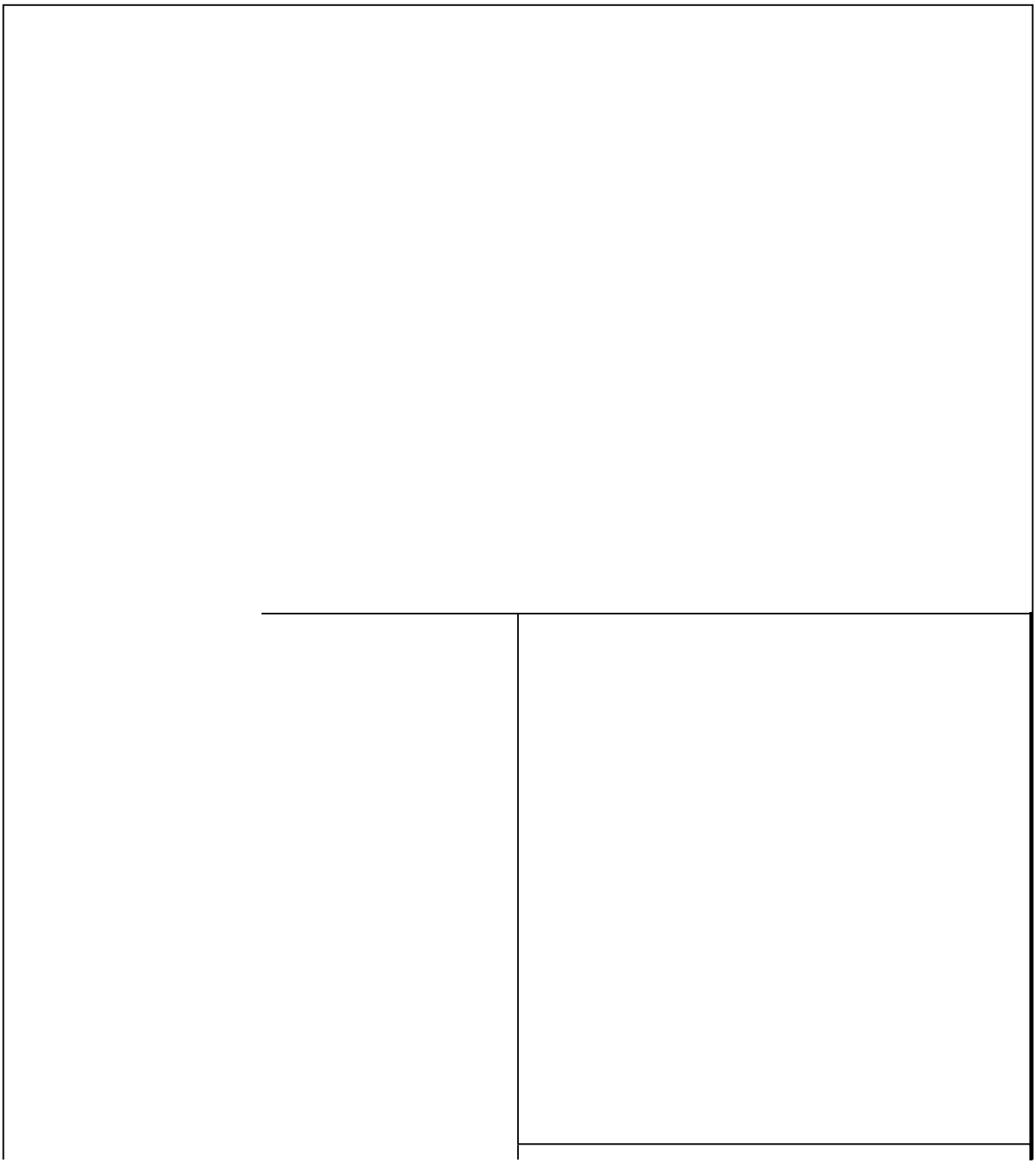

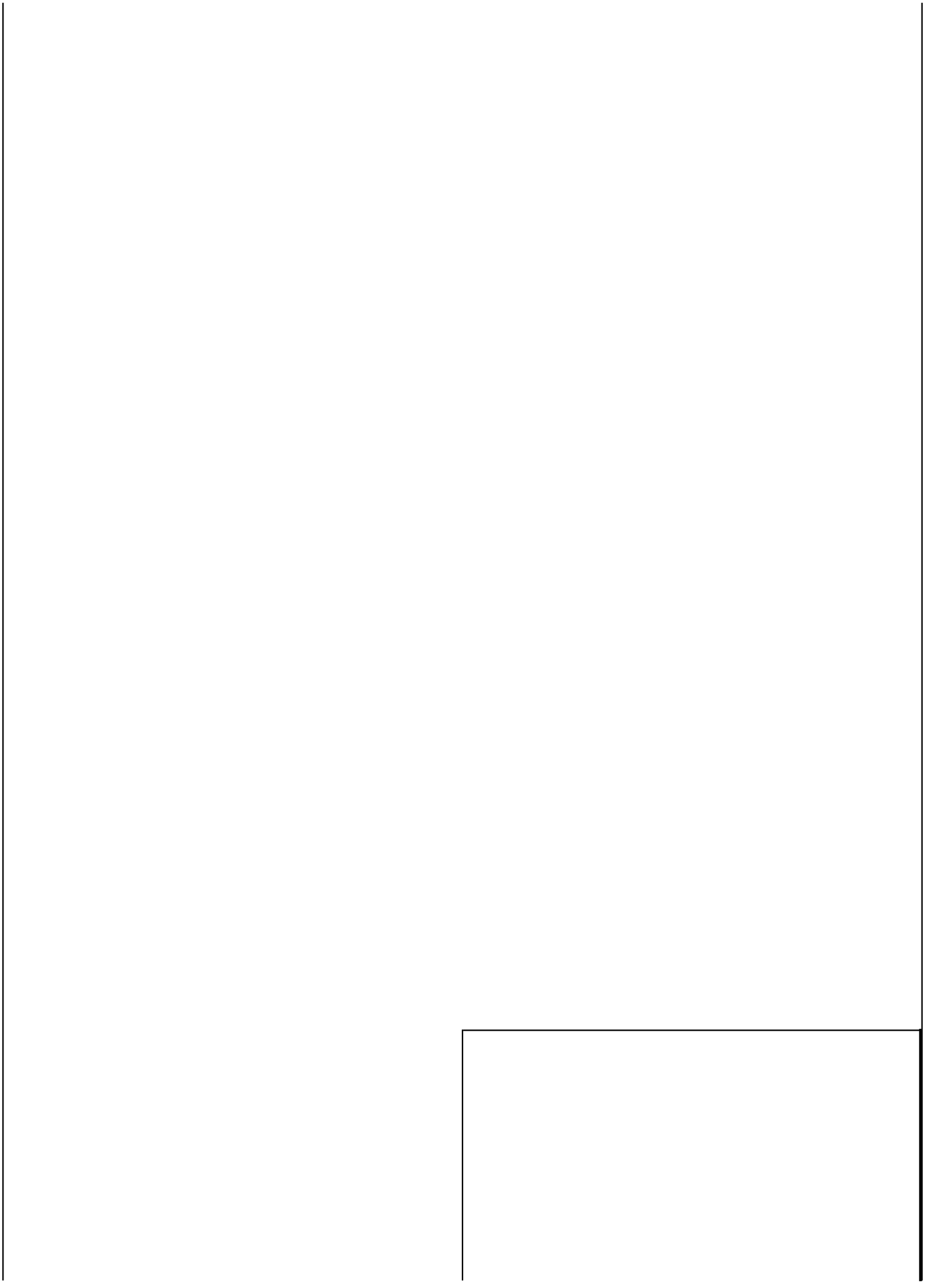

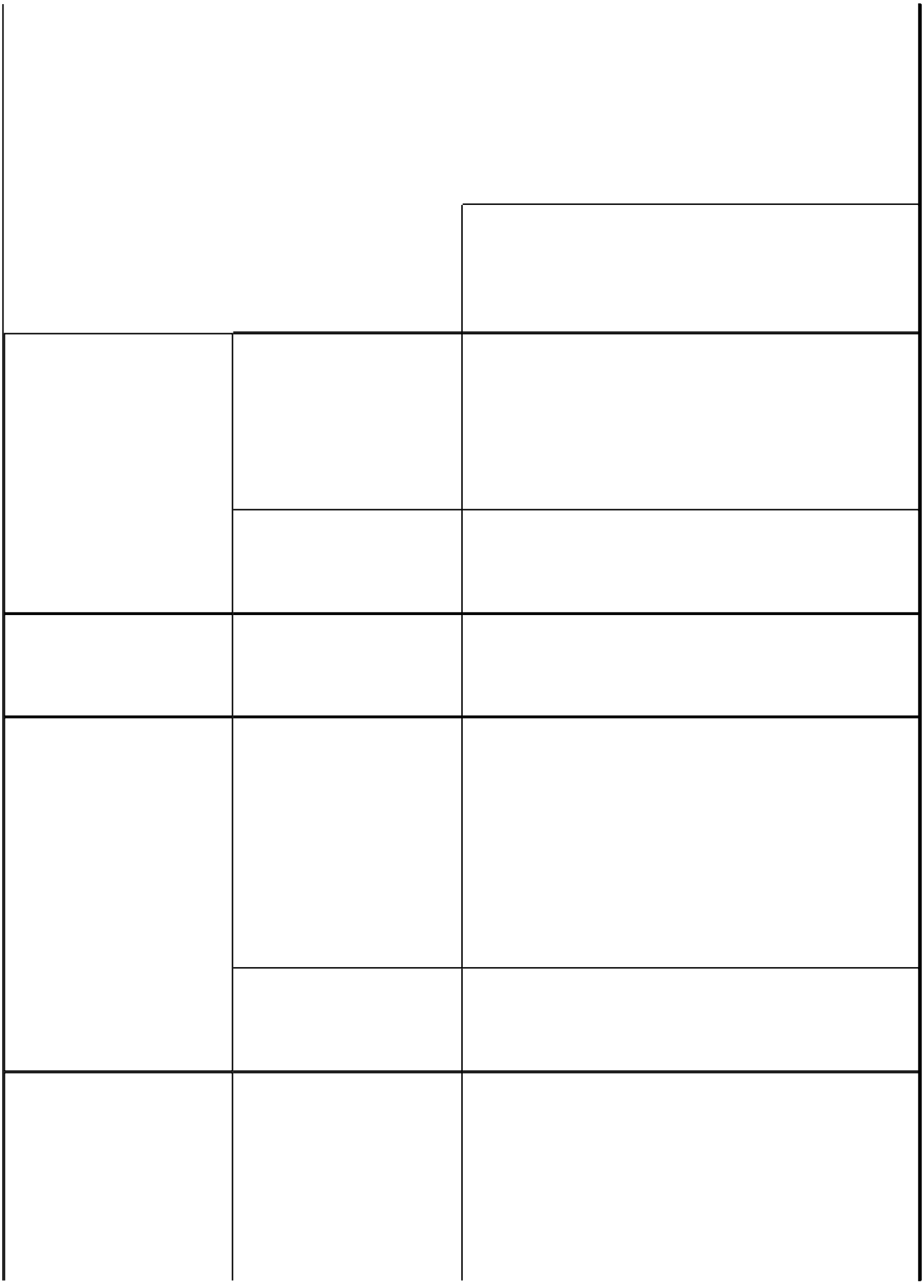

# Resources

## Recommended Resources

a. UNSW Library website: https://www.library.unsw.edu.au/
b. Moodle: https://moodle.telt.unsw.edu.au/login/index.php

## Course Evaluation and Development

Feedback on the course is gathered periodically using various means, including the UNSW myExperience process, informal discussion in the final class for the course, and the School's Student/Staff meetings. Your feedback is taken seriously, and continual improvements are made to the course based, in part, on such feedback.

In this course, recent improvements resulting from student feedback include: group formation within tutorial session, grading procedure and mechanism, documentation of special arrangement between each group with the teaching team,

assessment performance, you are eligible to apply for Special Consideration prior to submitting an assessment or sitting an exam.

UNSW now has a Fit to Sit / Submit rule, which means that if you attempt an exam or submit a piece of assessment, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's Special Consideration page.

Please note that students will not be required to provide any documentary evidence to support absences from any classes missed because of COVID-19 public health measures such as isolation. UNSW will not be insisting on medical certificates from anyone deemed to be a positive case, or when they have recovered. Such certificates are difficult to obtain and put an unnecessary strain on students and medical staff.

Applications for special consideration will be required for assessment and participation absences – but no documentary evidence for COVID 19 illness or isolation will be required.

# Academic Honesty and Plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Nj_eg_pgqk _r SLQU gq bcdglcb _q sqgle rfc umpbq mp gbc_q md mrfcpq _lb n_qqgle rfck mdd _q wmsp mul,*

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism, visit: student.unsw.edu.au/plagiarism. The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

If plagiarism is found in your work when you are in first year, your lecturer will offer you assistance to improve your academic skills. They may ask you to look at some online resources, attend the Learning Centre, or sometimes resubmit your work with the problem fixed. However more serious instances in first year, such as stealing another student's work or paying someone to do your work,look n g

# Academic Information

## Credit points

Course credit is calculated in Units-Of-Credit (UOC). The normal workload expectation for one UOC

- Moodle
- Lab Access
- Computing Facilities
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