UNSW Course Outline

ZEIT4604 Hydrology and Environmental Engineering Practice - 2024

Published on the 11 Feb 2024

General Course Information

Course Code : ZEIT4604
Year : 2024
Term : Semester 1
Teaching Period : Z1
Is a multi-term course? : No
Faculty : UNSW Canberra
Academic Unit : School of Engineering and Technology
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : UNSW Canberra at ADFA
Campus : UNSW Canberra
Study Level : Undergraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This final-year undergraduate course exposes students to the principles and engineering practice

of hydrology and environmental engineering. This includes the analysis of hydrological processes in surface and groundwater, precipitation, runoff, evapotranspiration, infiltration, recharge and discharge, catchment hydrology and water resources management. This course also examines the practice of environmental engineering of interest to civil engineering industry and Defence, including contamination site investigations and remediation, water and wastewater treatment, air pollution management, environmental management and environmental impact assessment.

Course Aims

The aim of this course is to gain a comprehensive understanding of the concepts and practice of hydrology, and the practice of environmental engineering. This 6UoC course builds on the fundamental principles and application of knowledge gained in ZEIT2602 Hydraulic Engineering and ZEIT3601 Environmental Engineering, for the purpose of teaching the practice of hydrology and environmental engineering.

Relationship to Other Courses

Prerequisite: ZEIT3601

The aim of this course is to gain a comprehensive understanding of the concepts and practice of hydrology, and the practice of environmental engineering. This course builds on the fundamental principles and application of knowledge gained in ZEIT2602 Hydraulic Engineering and ZEIT3601 Environmental Engineering, for the purpose of teaching the practice of hydrology and environmental engineering.

Course Learning Outcomes

Course Learning Outcomes	Engineers Australia - Professional Engineer (Stage 1)
CLO1 : Understand the principles of wastewater and water treatment, air pollution management, and contaminated site investigation and monitoring (building upon the fundamental principles learnt in previous hydraulic and environmental engineering courses).	• PEE1.3 : In-depth understanding of specialist bodies of knowledge within the engineering discipline • PEE1.6 : Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline
CLO2 : Demonstrate competence in engineering practice in wastewater and water treatment, air pollution management, and/or contaminated site investigation and remediation.	• PEE2.4 : Application of systematic approaches to the conduct and management of projects within the technology domain
CLO3 : Understand the legal, social and philosophical context and the practice of environmental management.	• PEE1.3 : In-depth understanding of specialist bodies of knowledge within the engineering discipline
CLO4 : Understand the water cycle, its impacts on stormwater-based engineering design, and in the dynamics of streamflow and methods for assessing and monitoring flow levels.	• PEE1.3 : In-depth understanding of specialist bodies of knowledge within the engineering discipline • PEE1.6 : Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline
CLO5 : Demonstrate competence in assessing a catchment, in modelling the movement and retention of rainwater, and in developing appropriate stormwater designs.	• PEE2.4 : Application of systematic approaches to the conduct and management of projects within the technology domain
CLO6 : Understand the issues associated with the management of flood routing.	• PEE1.3 : In-depth understanding of specialist bodies of knowledge within the engineering discipline

Course Learning Outcomes	Assessment Item
CLO1 : Understand the principles of wastewater and water treatment, air pollution management, and contaminated site investigation and monitoring (building upon the fundamental principles learnt in previous hydraulic and environmental engineering courses).	• Assignments • Final exam • Mid-session Quiz
CLO2 : Demonstrate competence in engineering practice in wastewater and water treatment, air pollution management, and/or contaminated site investigation and remediation.	• Excursion • Assignments • Final exam • Mid-session Quiz
CLO3 : Understand the legal, social and philosophical context and the practice of environmental management.	• Assignments • Final exam
CLO4 : Understand the water cycle, its impacts on stormwater-based engineering design, and in the dynamics of streamflow and methods for assessing and monitoring flow levels.	• Assignments • Final exam
CLO5 : Demonstrate competence in assessing a catchment, in modelling the movement and retention of rainwater, and in developing appropriate stormwater designs.	• Assignments • Final exam
CLO6 : Understand the issues associated with the management of flood routing.	• Assignments • Final exam

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

A website of course materials and other resources will be established on Moodle. Please log in regularly to access new course materials and information on the assignments, and to complete the barrier tests, needed to progress to each new subtopic.

The Learning Management System

Moodle is the Learning Management System used at UNSW Canberra. All courses have a Moodle site which will become available to students at least one week before the start of semester. Please find all help and documentation (including Blackboard Collaborate) at the Moodle Support page.

UNSW Moodle supports the following web browsers:

» Google Chrome 50+

» Safari 10+

** Internet Explorer is not recommended

** Addons and Toolbars can affect any browser's performance.

Operating systems recommended are:

Windows 7, 10, Mac OSX Sierra, iPad IOS10

For further details about system requirements click here.

Log in to Moodle here.

If you need further assistance with Moodle:

For enrolment and login issues please contact:
IT Service Centre
Email: itservicecentre@unsw.edu.au
Phone: (02) 9385-1333
International: +61 2 9385 1333

For all other Moodle issues please contact:
External TELT Support
Email: externalteltsupport@unsw.edu.au
Phone: (02) 9385-3331
International: +61 2 938 53331

Opening hours:
Monday – Friday 7:30am – 9:30 pm
Saturday & Sunday 8:30 am – 4:30pm

Other Professional Outcomes

Program Learning Outcomes

In this course, you will work towards the following Program Learning Outcomes of the BE (Hons) Civil program at UNSW Canberra:

2: Students will demonstrate a comprehensive understanding of design and construction

techniques and standards, and articulate directions of future research and knowledge development in civil engineering. (CLO1, CLO2, CLO4, CLO5)

3: Students will synthesise engineering design practice, contextual factors, norms and accountabilities in and the limitations on civil engineering. (All CLOs)

5: Students will demonstrate proficiency in applying systematic engineering synthesis and design processes, and critically evaluating and effectively communicating the results and implications to all audiences. (CLO2, CLO3, CLO5, CLO6)

6: Students will be able to operate in collaborative environments, as leader or member of interdisciplinary teams. (CLO2, CLO3, CLO5, CLO6)

7: Students will demonstrate independence, creativity and ethical conduct, and explain the importance of user-focused and sustainable solutions. (CLO2, CLO3, CLO5, CLO6)

Additional Course Information

Referencing

For all assignments in this course, students are required to include references to all sources of information, using either the APA referencing style or the Chicago footnote style. Information about these referencing styles is available on the Course Moodle site.

Study at UNSW Canberra

https://www.unsw.adfa.edu.au/study

Study at UNSW Canberra has lots of useful information regarding:

- Where to get help
- Administrative matters
- Getting your passwords set up
- How to log on to Moodle
- Accessing the Library and other areas.

Additional Information as required

CRICOS Provider no. 00098G
The University of New South Wales Canberra.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Engineers Australia - Professional Engineer (Stage 1)
Assignments Assessment Format: Group	40%	Start Date: Not Applicable Due Date: Not Applicable	• PEE2.1 : Application of established engineering methods to complex engineering problem solving • PEE2.2 : Fluent application of engineering techniques, tools and resources • PEE3.1 : Ethical conduct and professional accountability • PEE3.2 : Effective oral and written communication in professional and lay domains • PEE1.3 : In-depth understanding of specialist bodies of knowledge within the engineering discipline • PEE1.6 : Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline • PEE2.3 : Application of systematic engineering synthesis and design processes • PEE2.4 : Application of systematic approaches to the conduct and management of projects within the technology domain • PEE1.5 : Knowledge of engineering design practice and contextual factors impacting the engineering discipline
Final exam Assessment Format: Individual	40%	Start Date: Not Applicable Due Date: Not Applicable	• PEE1.1 : Comprehensive, theory based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline • PEE1.3 : In-depth understanding of specialist bodies of knowledge within the engineering discipline • PEE2.1 : Application of established engineering methods

			to complex engineering problem solving • PEE2.2 : Fluent application of engineering techniques, tools and resources • PEE2.3 : Application of systematic engineering synthesis and design processes • PEE2.4 : Application of systematic approaches to the conduct and management of projects within the technology domain • PEE1.4 : Discernment of knowledge development and research directions within the engineering discipline • PEE1.6 : Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline
Mid-session Quiz Assessment Format: Individual	15%	Start Date: Not Applicable Due Date: 29/04/2024	• PEE1.1 : Comprehensive, theory based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline • PEE1.3 : In-depth understanding of specialist bodies of knowledge within the engineering discipline • PEE2.1 : Application of established engineering methods to complex engineering problem solving • PEE2.2 : Fluent application of engineering techniques, tools and resources • PEE2.3 : Application of systematic engineering synthesis and design processes • PEE2.4 : Application of systematic approaches to the conduct and management of projects within the technology domain • PEE1.4 : Discernment of knowledge development and research directions within the engineering discipline • PEE1.6 : Understanding of the

			scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline
Excursion Assessment Format: Individual	5%	Start Date: Not Applicable Due Date: Not Applicable	• PEE2.1 : Application of established engineering methods to complex engineering problem solving • PEE2.2 : Fluent application of engineering techniques, tools and resources • PEE2.3 : Application of systematic engineering synthesis and design processes • PEE2.4 : Application of systematic approaches to the conduct and management of projects within the technology domain

Assessment Details

Assignments

Assessment Overview

Three assignments will form an important component of the assessment for this course..

In Assignment 1, conducted in groups of two, each group will choose and examine case study problems, involving the investigation of a potentially contaminated site and analysis of a water treatment problem. These will be used to develop several themes of environmental engineering practice, as examined in this course.

In Assignment 2, each individual student will complete a tutorial-type assignment on water and wastewater treatment.

In Assignment 3, conducted in groups of two, each student group will progressively develop an analysis of a rural catchment reflecting the learning outcomes of the course.

The assignments will be offered in case study mode, to foster the development of the students' skills in engineering practice. This will include referencing of standards and original source materials, the development of technical analyses, and the reporting of the proposed solutions. The detailed technical work on each project and the preparation of the assignment submission itself must be your own work.

The written component of the assignments should be submitted on Moodle, using the standard coversheet. Each assignment MUST be submitted in pdf format only in a single document, with all fonts embedded (otherwise it will be corrupted and unreadable). Please do not submit Word or image files, and please do not make multiple image file submissions for a single assignment. All supporting information (e.g. spreadsheet, Matlab, Maple or other files) MUST also be attached in their own files. All assignment submissions must also start with or be submitted with the SEIT coversheet, available on Moodle. Marking penalties will be applied for any failure to observe these procedures.

Course Learning Outcomes

- CLO1 : Understand the principles of wastewater and water treatment, air pollution management, and contaminated site investigation and monitoring (building upon the fundamental principles learnt in previous hydraulic and environmental engineering courses).
- CLO2 : Demonstrate competence in engineering practice in wastewater and water treatment, air pollution management, and/or contaminated site investigation and remediation.
- CLO3 : Understand the legal, social and philosophical context and the practice of environmental management.
- CLO4 : Understand the water cycle, its impacts on stormwater-based engineering design, and in the dynamics of streamflow and methods for assessing and monitoring flow levels.
- CLO5 : Demonstrate competence in assessing a catchment, in modelling the movement and retention of rainwater, and in developing appropriate stormwater designs.
- CLO6 : Understand the issues associated with the management of flood routing.

Detailed Assessment Description

Assignment 1 (15%) - group assessment on contaminated site assessment, in 2 parts, due 8 March and 28 March

Assignment 2 (10%) - individual assessment on water treatment, in 1 part, due 3 May

Assignment 3 (15%) - group assessment on hydrology, in 2 parts, due 21 May and 31 May

Assessment Length

Detailed instructions will be provided in the assignment handouts

Assignment submission Turnitin type

This is not a Turnitin assignment

Final exam

Assessment Overview

The examination components of the assessment provide assurance that the knowledge and

understanding demonstrated are your own and a measure of that knowledge and understanding. They also provide an extra incentive for study.

The mid-session quiz will be 2 hours long. The final examination will be 3 hours long. It will be held either in the final week of session or the final exam period. Detailed instructions for the final exam will be issued with the examination timetable.

Course Learning Outcomes

- CLO1 : Understand the principles of wastewater and water treatment, air pollution management, and contaminated site investigation and monitoring (building upon the fundamental principles learnt in previous hydraulic and environmental engineering courses).
- CLO2 : Demonstrate competence in engineering practice in wastewater and water treatment, air pollution management, and/or contaminated site investigation and remediation.
- CLO3 : Understand the legal, social and philosophical context and the practice of environmental management.
- CLO4 : Understand the water cycle, its impacts on stormwater-based engineering design, and in the dynamics of streamflow and methods for assessing and monitoring flow levels.
- CLO5 : Demonstrate competence in assessing a catchment, in modelling the movement and retention of rainwater, and in developing appropriate stormwater designs.
- CLO6 : Understand the issues associated with the management of flood routing.

Assessment Length

3 hours

Assignment submission Turnitin type

This is not a Turnitin assignment

Mid-session Quiz

Assessment Overview

The examination components of the assessment provide assurance that the knowledge and understanding demonstrated are your own and a measure of that knowledge and understanding. They also provide an extra incentive for study.

The mid-session quiz will be 2 hours long. The final examination will be 3 hours long. It will be held either in the final week of session or the final exam period. Detailed instructions for the final exam will be issued with the examination timetable.

Course Learning Outcomes

- CLO1 : Understand the principles of wastewater and water treatment, air pollution management, and contaminated site investigation and monitoring (building upon the fundamental principles learnt in previous hydraulic and environmental engineering courses).

- CLO2 : Demonstrate competence in engineering practice in wastewater and water treatment, air pollution management, and/or contaminated site investigation and remediation.

Detailed Assessment Description

To be held 29 April

Assessment Length

2 hours

Assignment submission Turnitin type

This is not a Turnitin assignment

Excursion

Assessment Overview

An excursion will be conducted in this course, in relation to the environmental engineering component. This will involve visits to major water and wastewater treatment facilities in the ACT. The excursion will involve an assignment, which will consist of 5% of the marks. Attendance on the excursion will be compulsory.

Course Learning Outcomes

- CLO2 : Demonstrate competence in engineering practice in wastewater and water treatment, air pollution management, and/or contaminated site investigation and remediation.

Detailed Assessment Description

Fieldwork assessment - due 26 April

General Assessment Information

Assessment Requirements

All marks obtained for assessment items during the session are provisional. The final mark as published by the university following the assessment review group meeting is the only official mark.

The assessment will consist of:

- Assignment 1 (2 parts) 15%
- Assignment 2 10%
- Assignment 3 (2 parts) 15%
- Excursion: 5%
- Mid-session quiz: 15%
- Final Exam 40%

Note that Assignment 1-1 is due on 8 March in Week 2, on which detailed feedback and grades will be given to students by week 4.

Assignments

Three assignments will form an important component of the assessment for this course..

In Assignment 1, conducted in groups of three, each group will choose and examine case study problems, involving the investigation of a potentially contaminated site and analysis of a water treatment problem. These will be used to develop several themes of environmental engineering practice, as examined in this course.

In Assignment 2, each individual student will complete a tutorial-type assignment on water and wastewater treatment.

In Assignment 3, conducted in groups of three, each student group will progressively develop an analysis of a rural catchment reflecting the learning outcomes of the course.

The assignments will be offered in case study mode, to foster the development of the students' skills in engineering practice. This will include referencing of standards and original source materials, the development of technical analyses, and the reporting of the proposed solutions. The detailed technical work on each project and the preparation of the assignment submission itself must be your own work.

Assignment submission requirements: The written component of each assignment should be submitted on Moodle, using the standard coversheet. Each assignment MUST be submitted in pdf format only, in a single document, with all fonts embedded (otherwise it will be corrupted and unreadable). Please do not submit Word or image files, and please do not make multiple image file submissions for a single assignment. All supporting information (e.g. spreadsheet, Matlab, Maple or other files) MUST also be attached in their own files. All assignment submissions must also start with or be submitted with the SEIT coversheet, available on Moodle. Marking penalties will be applied for any failure to observe these procedures.

Excursion

An excursion will be conducted in this course, in relation to the environmental engineering component. The excursion will involve an individual assignment, which will consist of 5% of the marks. Attendance on the excursion is compulsory.

Exams

The examination components of the assessment provide assurance that the knowledge and understanding demonstrated are your own and a measure of that knowledge and understanding. They also provide an extra incentive for study.

The mid-session quiz will be 2 hours long. The final examination will be 3 hours long. It will be held either in the final week of session or the final exam period. Detailed instructions for the final exam will be issued with the examination timetable.

Late Submissions

- *For Assignment 1-1, since this feeds into Assignment 1-2, no late submissions will be allowed;*
- *For Assignment 3-1, since this feeds into Assignment 3-2, no late submissions will be allowed;*
- *For the remaining assignments, unless prior arrangement is made with the lecturer or a formal application for special consideration is submitted, a penalty of 5% of the total available mark for the assessment will apply for each day that an assessment item is late up to a maximum of 5 days (120 hours) after which an assessment can no longer be submitted and a grade of 0 will be applied.*

Supplementary Assessment

Supplementary assessment in the event of failure of the course is generally not available, and should not be expected. Exceptions may be made for students in the final year of their program where there is a single failure preventing graduation.

Generative AI

For this course, the following policy on generative AI is adopted:

Assignments:

Simple Editing Assistance - Students are permitted to use standard editing and referencing software, but not Generative AI

Mid-session quiz and final exam:

No Assistance - It is prohibited to use any software or service to search for or generate information or answers

Grading Basis

Standard

Requirements to pass course

In order to pass this course, students are required to submit all assignments, and to achieve a pass grade in the final exam.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 26 February - 1 March	Lecture	Lecture 1: Contaminant Types, Sources, Regulation
	Lecture	Lecture 2: NEPM + Site Characterisation
Week 2 : 4 March - 8 March	Lecture	Lecture 3: Sampling Design
	Lecture	Lecture 4: Sampling - Soils, Groundwater
	Assessment	Assignment 1-1 due 18:00 Friday 8 March 2024
Week 3 : 11 March - 15 March	Other	Monday is Canberra Day, lecture lost
	Lecture	Lecture 5: Sampling - NAPLs, soil vapours
Week 4 : 18 March - 22 March	Lecture	Lecture 6: Laboratory Analysis + DQA
	Lecture	Lecture 7: Models + Risk Assessment + Remediation
Week 5 : 25 March - 29 March	Lecture	Lecture 8: Water and wastewater treatment 1
	Lecture	Lecture 9: Water and wastewater treatment 2
	Assessment	Assignment 1-2 due 18:00 Thurs 28 March 2024
Week 6 : 1 April - 5 April	Other	Monday is Easter Monday, lecture lost
	Fieldwork	HEEP Excursion to water treatment plants, Wed 3 April, 13:00 - 17:00 (to be confirmed)
	Other	Mid-session break, 6 to 21 April 2024
Week 7 : 22 April - 26 April	Lecture	Lecture 11: Water quality regulation
	Other	Wed is Military Training Day, lecture lost
	Assessment	Fieldwork assignment due: 18:00 Friday 26 April
Week 8 : 29 April - 3 May	Assessment	Midsession test in class, Monday 29 April 2024
	Lecture	Lectures 12-13: Air Pollution Management: Regulation + Control
	Assessment	Assignment 2 due: Friday 3 May
Week 9 : 6 May - 10 May	Lecture	Lecture 14a-b: Hydrology: introduction + basic concepts, statistics
Week 10 : 13 May - 17 May	Lecture	Lecture 15: Precipitation
	Lecture	Lecture 16: Evapotranspiration
Week 11 : 20 May - 24 May	Lecture	Lecture 17: Infiltration and groundwater flow
	Lecture	Lecture 18: Streamflow and hydrologic measurement
	Assessment	Assignment 3-1 due: 18:00 Tuesday 21 May
Week 12 : 27 May - 31 May	Lecture	Monday is Reconciliation Day, lecture moved to Tuesday Lecture 19: Rainfall-runoff modelling
	Lecture	Lecture 20: Unit hydrograph method
	Assessment	Assignment 3-2 due, 18:00 Friday 31 May
Week 13 : 3 June - 7 June	Lecture	Unprogrammed time: last week of session

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

General Schedule Information

Contact hrs are **2 x 2hrs lecture and 1 x 1hr tutorial per week** from week 1 to week 13. The tutorial will not be held in week 1. In addition, students are expected to spend at least 6 hrs per week for revision and assignment preparation.

Scheduled Classes

Lectures:

Mon 14:00 - 16:00, Seminar Room 02 (Z-30-SR02)

Wed 15:00 - 17:00, Seminar Room 02 (Z-30-SR02)

Tutorials

Tue 15:00 - 16:00, SL3 (Z-21-241) - may be changed depending on class preference

Lecturers

This course will be taught by the academic staff A/Prof Robert Niven (contaminated site investigations), Dr Jong-Leng Liow (water and wastewater treatment and Dr Matthias Kramer (hydrology). The course coordinator is A/Prof Robert Niven.

Attendance at Classes

Students are **expected to attend all classes** in the course in which they are enrolled. All requests for exemption from attendance or absence should be addressed to the Course Authority and where applicable, be accompanied by a medical certificate.

See University Rules at: https://student.unsw.edu.au/attendance

This attendance requirement applies irrespective of other non-educational commitments, for example sporting trips, or Defence-supported travel or study tours. **In no situation can another decision or offer from Defence override the requirement to attend this class.**

All Defence and Defence-funded students must also seek approval from relevant Defence authority for each exemption from attendance or absence.

Written Feedback

Detailed written feedback will be provided on all assignments. Note that Assignment 1-1 is due on 8 March in Week 2, on which detailed feedback and grades will be given to students by week 4

Course Resources

Prescribed Resources

Compulsory texts (you should have or obtain these books):

• Mihelcic, J. R. and Zimmerman, J. B. Environmental engineering: Fundamentals, Sustainability, Design. John Wiley & Sons, NY, edition 2, 2014, ISBN 978-1118741498.

• Subramanya, K, Engineering Hydrology, Fourth Edition, 2017, McGraw Hill Education.

Recommended Resources

The following are recommended as additional reading (some material is drawn from these references):

• Masters, G.M., Ela, W.P. (2008), “Introduction to Environmental Engineering and Science”, 3rd. ed., Pearson Int. Ed., Prentice Hall (especially useful for surface water quality and air quality).

• Domenico & Schwartz (1990), “Physical and Chemical Hydrogeology”, John Wiley & Sons, N.Y. (especially for groundwater pollution).

• NEPC (1999, 2013), National Environment Protection (Assessment of Site Contamination) Measure, National Environment Protection Council, Canberra; available online

• Defence reports on PFAS investigations – a large number of reports are available at http://

• Dingman, S.W. (2015), “Physical Hydrology”, 3rd. ed., Waveland Press, Inc. (detailed presentation of physical hydrological processes).

• Ladson, A. (2008)., “Hydrology - An Australian Introduction”, Oxford University Press.

For engineering report writing, refer to:

• Winckel, A. & Hart, B. (2002), “Report Writing Style Guide for Engineering Students”, 4th ed., Faculty of Engineering, University of South Australia, Adelaide;

https://lo.unisa.edu.au/pluginfile.php/1687722/mod_resource/content/0/

Report%20style%20writing%20guide_Engineering.pdf

Numerous other texts and references will also be nominated for specific topics – this is a fourth year course!

Additional Costs

Not applicable

Course Evaluation and Development

One of the key priorities in the 2025 Strategy for UNSW is a drive for academic excellence in education. One of the ways of determining how well UNSW is progressing towards this goal is by listening to our own students. Students will be asked to complete the myExperience survey towards the end of this course.

Students can also provide feedback during the semester via: direct contact with the lecturer, the "On-going Student Feedback" link in Moodle, Student-Staff Liaison Committee meetings in schools, informal feedback conducted by staff, and focus groups. Student opinions really do make a difference. Refer to the Moodle site for this course to see how the feedback from previous students has contributed to the course development.

Important note: Students are reminded that any feedback provided should be constructive and professional and that they are bound by the Student Code of Conduct Policy

https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Robert Niven		Room 129 B20	Email only	By appointment	No	Yes
Lecturer	Jong-Leng Liow		Room 104 B20	02 5114 5174	By appointment	No	No
	Matthias Kramer		Room 127 B20	0455 664 155	By appointment	No	No

Other Useful Information

Academic Information

Course Evaluation and Development

One of the key priorities in the 2025 Strategy for UNSW is a drive for academic excellence in education. One of the ways of determining how well UNSW is progressing towards this goal is by listening to our own students. Students will be asked to complete the myExperience survey towards the end of each course.

Students can also provide feedback during the semester via: direct contact with the lecturer, the "On-going Student Feedback" link in Moodle, Student-Staff Liaison Committee meetings in schools, informal feedback conducted by staff, and focus groups (where applicable). Student opinions really do make a difference. Refer to the Moodle site for your course to see how the feedback from previous students has contributed to the course development.

Important note: Students are reminded that any feedback provided should be constructive and professional and that they are bound by the Student Code of Conduct.

https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf

Equitable Learning Services (ELS)

Students living with neurodivergent, physical and/or mental health conditions or caring for someone with these conditions may be eligible for support through the Equitible Learning Services team. Equitable Learning Services is a free and confidential service that provides practical support to ensure your mental or physical health conditions do not adversely affect your studies.

Our team of dedicated **Equitable Learning Facilitators** (ELFs) are here to assist you through this process. We offer a number of services to make your education at UNSW easier and more equitable.

Further information about ELS for currently enrolled students can be found at: https://www.student.unsw.edu.au/equitable-learning

Academic Honesty and Plagarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW staff and students have a responsibility to adhere to this principle of academic integrity. All students are expected to adhere to UNSW's Student Code of Conduct. Find relevant information at: Student Code of Conduct (unsw.edu.au)

Plagiarism undermines academic integrity and is not tolerated at UNSW. It is defined as using the words or ideas of others and passing them off as your own, and can take many forms, from deliberate cheating to accidental copying from a source without acknowledgement.

For more information, please refer to the following:

https://student.unsw.edu.au/plagiarism

Submission of Assessment Tasks

Special Consideration

Special Consideration is the process for assessing and addressing the impact on students of short-term events, that are beyond the control of the student, and that affect performance in a specific assessment task or tasks.

Applications for Special Consideration will be accepted in the following circumstances only:

- Where academic work has been hampered to a substantial degree by illness or other cause;
- The circumstances are unexpected and beyond the student's control;
- The circumstances could not have reasonably been anticipated, avoided or guarded against by the student; and either:

(i) they occurred during a critical study period and was 3 consecutive days or more duration, or a total of 5 days within the critical study period; or

(ii) they prevented the ability to complete, attend or submit an assessment task for a specific date (e.g. final exam, in class test/quiz, in class presentation)

Applications for Special Consideration must be made as soon as practicable after the problem occurs and at the latest within three working days of the assessment or the period covered by the supporting documentation.

By sitting or submitting the assessment task the student is declaring that they are fit to do so and cannot later apply for Special Consideration (UNSW 'fit to sit or submit' requirement).

Sitting, accessing or submitting an assessment task on the scheduled assessment date, after applying for special consideration, renders the special consideration application void.

Find more information about special consideration at: https://www.student.unsw.edu.au/special/consideration/guide

Or apply for special consideration through your MyUNSW portal.

Late Submission of assessment tasks (other than examinations)

UNSW has a standard late submission penalty of:

- 5% per day,
- capped at five days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Students are expected to manage their time to meet deadlines and to request extensions as early as possible before the deadline.

Electronic submission of assessment

Except where the nature of an assessment task precludes its electronic submission, all assessments must be submitted to an electronic repository, approved by UNSW or the Faculty, for archiving and subsequent marking and analysis.

Release of final mark

All marks obtained for assessment items during the session are provisional. The final mark as published by the university following the assessment review group meeting is the only official mark.