UNSW Course Outline

CEIC8341 Membrane Processes - 2024

Published on the 25 Aug 2024

General Course Information

Course Code : CEIC8341
Year : 2024
Term : Term 3
Teaching Period : T3
Is a multi-term course? : No
Faculty : Faculty of Engineering
Academic Unit : School of Chemical Engineering
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Undergraduate, Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

In this course you will be introduced to membrane technology and its applications in the industry. The various membrane materials, structures, configurations, modules and processes will be discussed in detail along with some of the governing equations for use in the system design.

Advantages and limitations of this technology will be presented and discussed with you in class through workshops and lectures.

You will learn how to optimise membrane operation in terms of hydraulic and removal performances; and how membranes are used industrially - such as in water, wastewater, biotechnology, gas and food industries.

Course Aims

The current need for cleaner and more efficient treatment processes has significantly helped the development of membrane technology in industrial applications. This course aims to give students a strong foundational knowledge in membrane processes, which are core to environmental companies dealing with air/gas or water/wastewater treatments. Furthermore, knowledge and principles of membrane science is widely applicable to a range of chemical engineering-related industries including the water/wastewater, pharmaceutical, medical and food industries. This course will give students a deep understanding of how membranes are applied in these industries.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Describe and justify membrane technology selection for a wide range of industrial and domestic applications.
CLO2 : Define and select the appropriate membrane characteristics, configurations, operating conditions in response to design specifications.
CLO3 : Evaluate the suitability of membrane systems for a given application and provide design advice on the advantages and limitations of available options.
CLO4 : Analyse mass transfer in membrane processes, and use both theoretical and semi-empirical methods in design contexts.

Course Learning Outcomes	Assessment Item
CLO1 : Describe and justify membrane technology selection for a wide range of industrial and domestic applications.	• Online Quizzes • Assignment • Mid-session exam • Final Exam
CLO2 : Define and select the appropriate membrane characteristics, configurations, operating conditions in response to design specifications.	• Online Quizzes • Assignment • Mid-session exam • Final Exam
CLO3 : Evaluate the suitability of membrane systems for a given application and provide design advice on the advantages and limitations of available options.	• Assignment • Mid-session exam • Final Exam
CLO4 : Analyse mass transfer in membrane processes, and use both theoretical and semi-empirical methods in design contexts.	• Assignment • Mid-session exam • Final Exam

Learning and Teaching Technologies

Moodle - Learning Management System

Other Professional Outcomes

Engineers Australia, Professional Engineer Stage 1 Competencies

This course contributes to your development of the following EA Professional Engineer competencies:

- PE1.1 Comprehensive, theory based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline

- PE1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline
- PE2.1 Application of established engineering methods to complex engineering problem solving
- PE2.2 Fluent application of engineering techniques, tools and resources

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Online Quizzes Assessment Format: Individual	20%	Due Date: Week 2, Week 4, Week 7, Week 9, Week 10
Assignment Assessment Format: Individual	30%	Start Date: Week 5 Due Date: Week 8
Mid-session exam Assessment Format: Individual	20%	Due Date: Week 5
Final Exam Assessment Format: Individual	30%	Due Date: Exam Period

Assessment Details

Online Quizzes

Assessment Overview

Up to 4 equally-weighted quizzes will be given online. Questions will range between the direct application of the concepts/calculations given in class, to more critical assessment of topics and documents provided.

Course Learning Outcomes

- CLO1 : Describe and justify membrane technology selection for a wide range of industrial and domestic applications.
- CLO2 : Define and select the appropriate membrane characteristics, configurations, operating conditions in response to design specifications.

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.

For more information on Generative AI and permitted use please see here.

Assignment

Assessment Overview

The Assignment is a core part of this course. In this assignment project students will have an opportunity to apply concepts learned in class and the basic principles of transport phenomena in membranes.

Course Learning Outcomes

- CLO1 : Describe and justify membrane technology selection for a wide range of industrial and domestic applications.
- CLO2 : Define and select the appropriate membrane characteristics, configurations, operating conditions in response to design specifications.
- CLO3 : Evaluate the suitability of membrane systems for a given application and provide design advice on the advantages and limitations of available options.
- CLO4 : Analyse mass transfer in membrane processes, and use both theoretical and semi-empirical methods in design contexts.

Assessment Length

Refer to marking criteria on Moodle

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Generative AI Permission Level

Planning/Design Assistance

You are permitted to use generative AI tools, software or services to generate initial ideas, structures, or outlines. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e., what is generated by the tool, software or service should not be a part of your final submission. You should keep copies of your iterations to show your Course Authority if there is any uncertainty about the originality of your work.
If your Convenor has concerns that your answer contains passages of AI-generated text or media that have not been sufficiently modified you may be asked to explain your work, but we recognise that you are permitted to use AI generated text and media as a starting point and some traces may remain. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

Mid-session exam

Assessment Overview

This closed book quiz is intended primarily as a formative assessment but is counted towards the final mark at a significant level to encourage students to take it seriously and to discourage last-minute cramming. This quiz will be assessed on the basis of technical accuracy of calculations and evidence of good engineering judgment with assumptions and problem simplification.

Course Learning Outcomes

- CLO1 : Describe and justify membrane technology selection for a wide range of industrial and domestic applications.
- CLO2 : Define and select the appropriate membrane characteristics, configurations, operating conditions in response to design specifications.
- CLO3 : Evaluate the suitability of membrane systems for a given application and provide design advice on the advantages and limitations of available options.
- CLO4 : Analyse mass transfer in membrane processes, and use both theoretical and semi-empirical methods in design contexts.

Assignment submission Turnitin type

This is not a Turnitin assignment

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.
For more information on Generative AI and permitted use please see here.

Final Exam

Assessment Overview

The final exam is designed to ensure that students have a competent understanding of membrane technology described in the course notes, and discussed during the workshops. Questions will assess students' knowledge and skills in the description, definition, selection and/or analysis of membrane systems. The exam is closed book.

Course Learning Outcomes

- CLO1 : Describe and justify membrane technology selection for a wide range of industrial and domestic applications.

- CLO2 : Define and select the appropriate membrane characteristics, configurations, operating conditions in response to design specifications.
- CLO3 : Evaluate the suitability of membrane systems for a given application and provide design advice on the advantages and limitations of available options.
- CLO4 : Analyse mass transfer in membrane processes, and use both theoretical and semi-empirical methods in design contexts.

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.
For more information on Generative AI and permitted use please see here.

General Assessment Information

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 0 : 2 September - 8 September	Homework	Read course outlines and browse through Moodle
Week 1 : 9 September - 15 September	Lecture	Introduction to membrane processes
	Lecture	Micro and ultra-filtration
Week 2 : 16 September - 22 September	Lecture	Membrane for wastewater treatment
	Lecture	Membrane bioreactor (MBR)
	Assessment	Online Quiz 1
Week 3 : 23 September - 29 September	Lecture	Nanofiltration and reverse osmosis
	Tutorial	Introduction to Q+
	Homework	Self study questions
Week 4 : 30 September - 6 October	Tutorial	MBR design
	Lecture	Fouling and fouling control Membrane ageing and autopsy
	Assessment	Online quiz 2 (virtual plant visits)
Week 5 : 7 October - 13 October	Tutorial	Q+ tutorial (and introduction to course assignment)
	Lecture	Organic membrane fabrication
	Assessment	Online quiz 3 (mid-term)
Week 6 : 14 October - 20 October	Homework	Flexible week Online “Ask Me Anything” Session Revisions, work on course assignment and Q+ exercise
Week 7 : 21 October - 27 October	Lecture	Inorganic membrane fabrication
	Lecture	Membrane characterisation
	Assessment	Online quiz 4 (submission of Q+ design)
Week 8 : 28 October - 3 November	Lecture	Gas separation
	Lecture	Membrane distillation
	Assessment	Course assignment due
Week 9 : 4 November - 10 November	Lecture	Bioseparation
	Tutorial	Feedback on assignment
	Assessment	Online quiz 5 (Gas, MD and making)
Week 10 : 11 November - 17 November	Laboratory	Lab visit
	Seminar	Membrane research seminar
	Assessment	Online quiz 6 (lab visit)

Attendance Requirements

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

General Schedule Information

2-hour-classes will be held on the dates shown in the schedule. Emphasis will be given to lectures including questions for the students to reflect their learning. At the end of most lectures, opportunity will be given for the students to ask further question about the lectures and to seek assistance towards self-study questions and/or group assignment. This will encourage interactions with the class. This time will also be used for discussing more general issues (costs, environmental impacts, …) related to membrane processes. Visit and demonstration in the labs

of the Membrane Centre will be used as a practical approach to better understand membrane processes.

Keeping with the principles of adult learning, it is expected that some of the time allocated to this course will be spent in self-directed learning. Hence, the heavy emphasis will be given to the assessment on your own assignment and self-directed reading. The list of self-study questions should be used as a guideline to direct your private reading and your understanding of the seminars over the session. The list is not exhaustive but is indicative of the range of principles that you should be able to describe in general terms by the end of the course and of the types of questions that may be on the examination.

Course Resources

Recommended Resources

Course Notes from CEIC8341 and/or the textbooks listed below will be helpful. More notes will be given within the first weeks of session; students are expected to work on the self study questions and their assignment at their own speed. Some of the notes will be available on Moodle.

Key references:

- M. Mulder, Basic Principles of Membrane Technology, 2nd Ed., Dordrecht, Kluwer Academic Publishers, (1996)
- R.H. Perry & D.W. Green (Eds.), Perry's Chemical Engineers' Handbook, 7th Ed., N.Y., McGrawHill, pp 22-37 – 22-69 (1997)
- W.S.W. Ho & K.K. Sirkar (Eds.), Membrane Handbook, N.Y., Van Nostrand Reinhold (1992)

Other resources:

- American Waste Water Association, Water treatment membrane processes, McGraw-Hill (1996)
- Z. Amjad, Reverse Osmosis – Membrane technology, water chemistry and industrial applications, Van Nostrand Reinhold (1993)
- Metcalf and Eddy, Wastewater engineering, treatment and reuse, McGraw-Hill (2002)
- S. Judd, The MBR book, Elsevier publishing - 2nd edition (2010)
- S. Judd & B. Jefferson (Eds) Membranes for Industrial Wastewater Recovery and Re-use, Elsevier Science Ltd. (2003)
- M. Cheryan, Ultrafiltration and Microfiltration Handbook, Technomic (1998)

Millipore, Kutoba, SUEZ (Zenon), Whatman, DuPont and other membrane companies have their catalogues on-line with membrane characteristics and recent applications.

Many membrane-based research journals (Journal of Membrane Science, Desalination, Water Research, Water Sciences and Technologies) and industrial journals (Membrane Technology and Filtration&Separation) could be found on: http://www.sciencedirect.com

Course Evaluation and Development

Course evaluation and development feedback is welcome any time but is primarily sought through the myExperience survey run at the end of term. Based on previous feedback, we have spent a lot of effort to clarify what you need to do for each assignment (through clearer marking rubrics and work expectations), and give you much more immediate feedback on your progress during the term.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Pierre Le Clech		Office 532 in SEB	0293855762	By email appointment	Yes	Yes

Other Useful Information

Academic Information

I. Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to, or within 3 working days of, submitting an assessment or sitting an exam.

Please note that UNSW has a Fit to Sit rule, which means that if you sit an exam, 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.

II. Administrative matters and links

All students are expected to read and be familiar with UNSW guidelines and polices. In particular, students should be familiar with the following:

- Attendance
- UNSW Email Address
- Special Consideration
- Exams
- Approved Calculators
- Academic Honesty and Plagiarism
- Equitable Learning Services

III. Equity and diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equitable Learning Services. Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

IV. Professional Outcomes and Program Design

Students are able to review the relevant professional outcomes and program designs for their streams by going to the following link: https://www.unsw.edu.au/engineering/student-life/student-resources/program-design.

Note: This course outline sets out the description of classes at the date the Course Outline is published. The nature of classes may change during the Term after the Course Outline is published. Moodle or your primary learning management system (LMS) should be consulted for the up-to-date class descriptions. If there is any inconsistency in the description of activities between the University timetable and the Course Outline/Moodle/LMS, the description in the Course Outline/Moodle/LMS applies.

Academic Honesty and Plagarism

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. *Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.*

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.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis or contract cheating) even suspension from the university. The Student Misconduct Procedures are available here:

www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf

Submission of Assessment Tasks

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of five percent (5%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day. This is for all assessments where a penalty applies.

Work submitted after five days (120 hours) will not be accepted and a mark of zero will be awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These will be clearly indicated in the course outline, and such assessments will receive a mark of zero if not completed by the specified date. Examples include:

- Weekly online tests or laboratory work worth a small proportion of the subject mark;
- Exams, peer feedback and team evaluation surveys;
- Online quizzes where answers are released to students on completion;
- Professional assessment tasks, where the intention is to create an authentic assessment that

has an absolute submission date; and,
- Pass/Fail assessment tasks.

Faculty-specific Information

Engineering Student Support Services – The Nucleus - enrolment, progression checks, 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

Phone

(+61 2) 9385 8500 – Nucleus Student Hub

(+61 2) 9385 7661 – Engineering Industrial Training

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

School-specific Information

Course Workload

Course workload is calculated using the Units-Of-Credit (UOC). The normal workload expectation for one UOC is approximately 25 hours per term. This includes class contact hours, private study, other learning activities, preparation and time spent on all assessable work.

Most coursework courses at UNSW are 6 UOC and involve an estimated 150 hours to complete, for both regular and intensive terms. Each course includes a prescribed number of hours per week (h/w) of scheduled face-to-face and/or online contact. Any additional time beyond the prescribed contact hours should be spent in making sure that you understand the lecture material, completing the set assignments, further reading, and revising for any examinations. Most 6 UoC courses will involve approximately 10-12 hours per week of work on your part. If you're not sure what to do in these hours of independent study, the resources on the UNSW

Academic Skills pages offer some suggestions including: making summaries of lectures, read/ summarise sections from the textbook, attempt workshop problems, reattempting workshop problems with some hints from the solutions, looking for additional problems in the textbook.

Full-time enrolment at university means that it is a *full-time* occupation for you and so you would typically need to devote 35 hours per week to your studies to suceed. Full-time enrolment at university is definitely incompatible with full-time employment. Part-time/casual employment can certainly fit into your study schedule but you will have to carefully balance your study obligations with that work and decide how much time for leisure, family, and sleep you want left after fullfilling your commitments to study and work. Everyone only gets 168 hours per week; overloading yourself with both study commitments and work commitments leads to poor outcomes and dissatisfaction with both, overtiredness, mental health issues, and general poor quality of life.

On-campus Class Attendance

Most classes at UNSW are "In Person" and run in a face-to-face mode only. Attendance and participation in the classes is expected. As an evidence-driven engineer or scientist, you'll be interested to know that education research has shown students learn more effectively when they come to class, and less effectively from lecture catch-up recordings. If you have to miss a class due to illness, for example, we expect you to catch up in your time, and within the coming couple of days.

For most courses that are running in an "in person" mode:

- Lectures are normally recorded to provide an opportunity to review material after the lecture; lecture recordings are not a substitute for attending and engaging with the live class.
- Workshops/tutorials are not normally recorded as the activities that are run within those sessions normally cannot be captured by a recording. These activities may also include assessable activities in some or all weeks of the term.
- Laboratories are not recorded and require in-person attendance. Missing laboratory sessions may require you to do a make-up session later in the term; if you miss too many laboratory sessions, it may be necessary to seek a Permitted Withdrawal from the course and reattempt it next year, or end up with an Unsatisfactory Fail for the course.
- Assessments will often require in-person attendance in a timetabled class or a scheduled examination.

Submission of Assessment Tasks

In the School of Chemical Engineering, all written work will be submitted for assessment via

Moodle unless otherwise specified. Attaching cover sheets to uploaded work is *not* required unless specifically requested for an individual assessment task; when you submit work through Moodle for assessment you are agreeing to uphold the Student Code.

Some assessments will require you to complete the work online and it may be difficult for the course coordinator to intervene in the system after the due date. You should ensure that you are familiar with assessment systems well before the due date. If you do this, you will have time to get assistance before the assessment closes.

All submissions are expected to be neat and clearly set out. Your results are the pinnacle of all your hard work and should be treated with respect. Presenting results clearly gives the marker the best chance of understanding your method; even if the numerical results are incorrect. Please make it easy for the markers who are looking at your work to see your achievement and give you due credit.

Marking guidelines for assignment submissions will be provided at the same time as assignment details to assist with meeting assessable requirements. Submissions will be marked according to the marking guidelines provided.

Academic Integrity

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage (International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013). At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity and plagiarism can be located at:

- The Current Students site
- The ELISE training site

The Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct.

To help describe what we are looking for, here are some things that we consider to be quite acceptable (even desirable!) actions for many assessments, and some that we consider to be unacceptable in most circumstances. Please check with the instructions for your assessments

and your course coordinator if you're unsure. As a rule of thumb, if you don't think you could look the lecturer in the eye and say "this is my own work", then it's not acceptable.

Acceptable actions

 reading/searching through material we have given you, including lecture slides, course notes, sample problems, workshop problem solutions

 reading/searching lecture transcripts

 reading/searching resources that we have pointed you to as part of this course, including textbooks, journal articles, websites

 reading/searching through your own notes for this course

 all of the above, for any previous courses

 using spell checkers, grammar checkers etc to improve the quality of your writing

 studying course material with other students

Unacceptable actions

 asking for help completing an assessment from other students, friends, family

 asking for help on Q&A or homework help websites

 searching for answers to the specific assessment questions online or in shared documents

 copying material from any source into your answers

 using generative AI tools to complete or substantially complete an assessment for you

 paying someone else to do the assessment for you

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism. Further information about referencing styles can be located at https://student.unsw.edu.au/referencing.

For assessments in the School of Chemical Engineering, we recommend the use of referencing

software such as Mendeley or EndNote for managing references and citations. Unless required otherwise specified (i.e. in the assignment instructions) students in the School of Chemical Engineering should use either the APA 7th edition, or the American Chemical Society (ACS) referencing style as canonical author-date and numbered styles respectively.

Artificial intelligence tools such as ChatGPT, CodePilot, and built-in tools within Word are modern tools that are useful in some circumstances. In your degree at UNSW, we're teaching you skills that are needed for your professional life, which will include how to use AI tools responsibly plus lots of things that AI tools cannot do for you. AI tools already are (or will soon be) part of professional practice for all of us. However, if we were only teaching you things that AI could do, your degree would be worthless, and you wouldn't have a job in 5 years.

Whether the use of AI tools in an assessment is appropriate will depend on the goals of that assessment. As ever, you should discuss this with your lecturers – there will certainly be assessments where the use of AI tools is encouraged, as well as others where it would interfere with your learning and place you at a disadvantage later. Our goal is to help you learn how to ethically and professionally use the tools available to you. To learn more about the use of AI, see this discussion we have written where we analyse the strengths and weaknesses of generative AI tools and discuss when it is professionally and ethically appropriate to use them.

While AI may might provide useful tools to help with some assessments, UNSW's policy is quite clear that taking the output of generative AI and submitting it as your own work will never be appropriate, just as paying someone else to complete an assessment for you is serious misconduct.

Asking Questions

Asking questions is an important part of learning. Learning to ask good questions and building the confidence to do so in front of others is an important professional skill that you need to develop. The best place to ask questions is during the scheduled classes for this course, with the obvious exception being questions that are private in nature such as special consideration or equitable learning plans. Between classes, you might also think of questions — some of those you might save up for the next class (write them down!), and some of them you might ask in a Q&A channel on Teams or a Q&A forum on Moodle. Please understand that staff won't be able to answer questions on Teams/Moodle immediately but will endeavour to do so during their regular working hours (i.e. probably not at midnight!) and when they are next working on this particular course (i.e. it might be a day or two). Please respect that staff are juggling multiple work

responsibilities (teaching more than one course, supervising research students, doing experiments, writing grants, …) and also need to have balance between work and the rest of their life.

School Contact Information

For assistance with enrolment, class registration, progression checks and other administrative matters, please see the Nucleus: Student Hub. They are located inside the Library – first right as you enter the main library entrance. You can also contact them via http://unsw.to/webforms or reserve a place in the face-to-face queue using the UniVerse app.

For course administration matters, please contact the Course Coordinator.

Questions about the this course should normally be asked during the scheduled class so that everyone can benefit from the answer and discussion.