

FOOD3010, FOOD8010

Food Products and Ingredients Technology

Term 1, 2022



Course Overview

Staff Contact Details

Convenors

Name	Email	Availability	Location	Phone
Alison Jones	alison.jones@unsw.edu.au	consultation via email or MSTeams	Rm 433	9385 5745

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.

If circumstances outside your control impact on submitting assessments, Special Consideration may be granted, usually in the form of an extension or a supplementary assessment. Applications for Special Consideration must be submitted [online](#).

For course administration matters, please contact the Course Coordinator.

Course Details

Units of Credit 6

Summary of the Course

This course is presented in a series of weekly lectures and tutorials covering the science behind the major food categories including their production, preservation, distribution and storage. Food commodities are introduced in groups, including dairy, meat, fish, fruit, vegetables, beverages, eggs, sugars, cereals and lipids. These commodities and their products constitute the core sectors of the food industry. The need for preservation is discussed, including physical, chemical and biological deterioration factors and water relationships. Technologies covered include thermal processing, chilling, freezing, drying, brining, pickling, packaging (MAP and CAP), and chemical preservatives.

Course Aims

The overall aim of this course is to provide the student with a sound knowledge of the technologies involved in the handling, preservation and processing of the major food commodities and their products. More specifically, this course aims:

- to examine the properties and processing characteristics of the main components of major food commodities;
- to study the methods and techniques used in the food industry for extending the storage and/or shelf-life of these commodities;
- to study the methods and equipment used in commercial operations for manufacturing food products based on these commodities; and
- to investigate the factors influencing the organoleptic and keeping qualities of these commodities and their products.

Course Learning Outcomes

1. Demonstrate a sound knowledge of the physical, chemical and biological characteristics of the major food commodities including meat, fish, eggs, dairy, sugar, fats and oils, fruits, vegetables, cereals and legumes.
2. Explain how certain factors can affect the shelf-life and quality of the major food commodities and their products.
3. Demonstrate a sound understanding of the principles of food preservation; how they affect the shelf-life of food, how they are incorporated into hurdle technologies and be able to apply this knowledge in real world examples.
4. Develop a capacity for critical thinking by reviewing and critiquing scientific literature in order to present an academically robust opinion.
5. Communicate with your peers in a professional environment through oral presentation and/or scientific writing.

The Institute of Food Technologists Higher Education Review Board (IFT HERB) approval 2021-2026.

Teaching Strategies

FOOD3010/8010 involves a series of technical lectures, covering both the theoretical as well as practical aspects. The lecture recordings, required readings and tutorial sessions will be made available to you through the Moodle course page. Because the course covers a diverse range of food commodities, topics discussed in the lectures will be selective. Students are expected to further explore areas not discussed fully in the classes by studying reference materials and appropriate texts. The discussion forum assessment is a part of this teaching strategy. Through the various learning and teaching strategies, students should acquire or strengthen a number of crucial attributes, including: research and evaluation of scientific literature, formal scientific communication/ scientific writing, critical evaluation of peer work, peer collaboration and information literacy.

FOOD3010/8010 is a core course of the various Food Science and Technology programs at both the undergraduate and postgraduate level. The primary objective of these programs is to prepare the graduates to be competent professionals who can help advance the food and allied industries. This will require the students to be:

- Critical thinkers with the capacity to amalgamate knowledge and apply reasoned judgment.
- Problem solvers with the ability to apply their knowledge and skills to deal with real world problems and issues that can arise.
- Lifelong learners so that they can continually add-to, develop and refine their knowledge and skills.

Not all of the course content will be taught and/or tested in the tutorials in detail. Rather, students are expected to deepen their understanding of the course content by themselves and, by doing so, learn how to distill essential information from a large and diverse collection of references. Students are further given the opportunity to practice critical thinking, problem solving, peer evaluation and scientific writing in the format of an online class forum where the class will discuss and critically evaluate solutions to industry issues. Such skills in information retrieval, processing, interpretation and summarisation are crucial for a food technologist as these skills are frequently required in professional undertakings in the food industry.

Additional Course Information

In designing this course, it is assumed that the student is familiar with the basic elements of food chemistry (e.g. structures and properties of protein, carbohydrate, and lipid) and food microbiology (e.g. properties of major groups of food poisoning and spoilage organisms) and the basic principles of unit operations in food processing (e.g. mass and energy transfer, freezing, drying, etc.). These concepts will be assumed knowledge, that is, frequently referred to, but not necessarily explained in more detail. If students encounter difficulties in understanding these concepts, they are advised to review them by consulting appropriate texts.

This course runs concurrently with the FOOD3020/8020 Food Technology Laboratory, in which students conduct weekly experiments on select food categories. The FOOD3020/8020 laboratory allows students to observe many of the key principles taught in this course through “hands-on” experience (e.g. egg candling, starch gelatinisation and freeze-thaw stability, flour suitability for different applications, chocolate tempering etc). If taking these two courses concurrently, it is recommended that you keep up to date with the readings, lectures and tutorial information provided in this course. By doing so, it can help reinforce the concepts learnt in this course and develop a stronger understanding of the data observed within the laboratory classes.

Assessment

Assessment task	Weight	Due Date	Course Learning Outcomes Assessed
1. Moodle Quizzes (3 x 10% each)	30%	Wk 3 quiz closes 04/03/22 09:00 AM, Wk 5 quiz closes 18/03/22 09:00AM and wk 9 quiz closes 15/04/22 09:00AM	1, 2, 3
2. Online Forum Exercise	20%	22/04/2022 05:00 PM	1, 2, 3, 4, 5
3. Final Exam	50%	Not Applicable	1, 2, 3, 4

Assessment 1: Moodle Quizzes (3 x 10% each)

Start date: Wk 3 quiz opens 03/03/22 09:00 AM, Wk 5 quiz opens 17/03/22 09:00AM and Wk 9 quiz opens 14/04/22 09:00AM,

Assessment length: Approximately 10 questions

Due date: Wk 3 quiz closes 04/03/22 09:00 AM, Wk 5 quiz closes 18/03/22 09:00AM and wk 9 quiz closes 15/04/22 09:00AM

There will be **three short Moodle quizzes in weeks 3, 5 and 9** that will test each student's understanding of the key concepts from the lecture and tutorial content. Quizzes will consist of approximately 10 multiple choice and/or short answer style questions with roughly a 15 minute start to completion time limit. Each student will have only one attempt available to them per quiz.

The quizzes can be accessed and completed through the Moodle Quiz link on the course page in Moodle. Quizzes will be open on the Moodle course page for a max. period of 24 hours and it is the student's responsibility to attempt and complete each quiz within the set time period before the link closes, otherwise a zero mark will be given.

Assessment 2: Online Forum Exercise

Start date: 18/04/2022 09:00 AM

Assessment length: Your initial opinion piece should be approximately 500 words. There is no word limit on your peer comments.

Due date: 22/04/2022 05:00 PM

The ability to research, interpret and critically evaluate technical information in order to solve problems and/or present informed and scientifically robust arguments is a very valuable skill for a food technology graduate. This assessment is designed to develop your ability in these skills.

Students will be given a real-world issue to analyse and discuss in a class forum. An online forum link will become available on the Moodle course page during week 10 from 09:00 am AEST Monday 18th April until 17:00 pm AEST Friday 22nd April. Each student is required to research the forum topic (given below in the assessment criteria) and post their **own individual opinion** piece (about 500 words) to the Forum link on the Moodle course page. Students will also be required to read and comment on other student posts in a constructive and respectful manner. **You must post your opinion piece and comments to the forum before it closes (please note that there is a 30 minute time lag between**

you posting your initial opinion piece and being able to see other student posts). Full details are given in the assessment criteria section below.

Assessment criteria

In week 10, each student is required to research the forum topic below and post their **own individual opinion** piece (about 500 words) to the Forum link on the Moodle course page. The forum link will open 9am Monday 18th April and close 5pm Friday 22nd April.

- **FORUM TOPIC:** *A growing trend among Australian consumers is the desire for fresh minimally processed pre-prepared fruit and vegetable packs that offer convenience and a seemingly “clean label.” Such minimally processed products often come with a limited shelf-life and thus, manufacturers have had to innovate in order to preserve the quality of these foods. As a result, Australian supermarkets now contain an array of different fresh salad kits as discussed in your fruits and vegetables tutorial.*
- *Pretend you are the manufacturer of a fresh salad kit that contains the following ingredients: fresh cos lettuce leaves cut into approximately 5cm slices, 1cm thick slices of cucumber, whole cherry tomatoes, 1cm cubed croutons of dried wheat bread, RTE-bacon pieces and vinaigrette dressing.*
- *What are the main challenges in trying to assemble these ingredients in order to achieve the longest shelf life? How would you overcome these challenges?*

You should be ready to justify your opinions and standpoints. Once your opinion piece is posted to the forum (you are given a 30 minute editing window), you will be able to view other people’s comments and opinions. It is expected that you will read other student posts and offer comment on why you agree or disagree with them. The objective of this exercise is to showcase the depth of your understanding while still being able to express your ideas in a respectful, clear, concise, coherent manner. You will also be required to work respectfully and constructively within a collaborative setting with your peers. This includes how well you are able to offer constructive feedback, accept peer assessment, and/or respectfully justify your own standpoints using logic and academically backed arguments. It is also expected that you will be able to reference your sources if prompted or queried by other students. Students are reminded not to copy sections from books, reviews or other published sources. This is plagiarism and will result in penalty in accordance with the University’s anti-plagiarism policy. The rubric for this assessment is given in Table 1 below.

Additional details

Table 1: Rubric for Assessment 2, Online Forum Exercise (20%)

GRADED ASPECT	ELEMENTS FOR A POOR GRADE (F/PS)	ELEMENTS FOR A SATISFACTORY GRADE (CR/D)	ELEMENTS FOR AN EXCELLENT GRADE (HD)
PEER REVIEW AND COLLABORATIVE SKILLS * (5 marks)	There's a strong imbalance in this student's contribution to the forum discussion. They have offered little helpful and/or inciteful peer feedback or justification. There is little attempt to be respectful or constructive.	Discussion is respectful and constructive. However, there's a moderate imbalance in this student's contribution to the discussion. They may have offered much peer feedback but it is incorrect, unjustified or irrelevant.	Discussion is respectful, constructive and academic. They have offered helpful feedback to their peers which is correct, relevant and justified in the context given. They are able to accept judgement by their peers respectfully. They can justify their opinions with a logical academic argument.
QUALITY OF INFORMATION PRESENTED (15 marks)	Overall, the quality of the information presented is adequate but with several problems such as – lacks depth of knowledge, incorrect, poorly sourced, not coherently linked, illogical or unimportant to the argument or topic presented. The length of the opinion piece is inappropriate (it should be approx. 500 words).	Overall, the quality of the information presented is good but with some minor problems such as – some questionable sources of information, depth of knowledge in some areas is poor or incorrect, some concepts are not coherently linked, hard to follow and/or unimportant to the argument or topic presented.	Overall, the quality of the information presented is excellent – shows a sound knowledge of the issue, contains correct, important and high-quality sources of information, argument is convincing, coherent and easy to follow with a clear opinion.
* Being able to effectively explain and justify your opinions is a useful skill. However, it's also important to be able to offer and listen to constructive feedback on those opinions. Try to back your opinions with academic arguments rather than emotional "it just sounds correct" arguments.			

Assessment 3: Final Exam

A final exam will be conducted during the end of session exam block. This will be a timed (2 hour) online exam requiring explanations, calculations and written paragraph-style answers that cover the course content presented during weeks 1-10. A final exam is given because the course learning outcomes include a significant level of technical learning which can be effectively integrated and assessed in a final exam. The final examination will consist of higher level questions that are designed to assess your ability in the following areas: your familiarity with the key understandings of the course content; your depth of knowledge of fundamental concepts covered in the course and your ability to apply and integrate course concepts and discuss the relevant issues in a clear and concise manner. More details will be provided by the course convenor.

More information about the final exam will be provided by the course convenor.

Additional details

Marks and general feedback for course assessments will be released through the Moodle course page. Students can request more specific feedback by contacting the course authority. Unless special consideration is sought and granted, any student who fails to attempt and complete assessments within the required time period will receive a ZERO mark.

Attendance Requirements

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

Course Schedule

This course will consist of roughly 4 hours of lecture content per week plus a 2-hour tutorial with Dr Alison Jones (**Thursdays 4-6 pm, via the BB collaborate link on the Moodle course page**). Challenge questions will be posted on Moodle for consideration during the tutorials. The tutorial sessions are your time to ask questions and further explore concepts from the lecture and supplementary materials. The lecture recordings, lecture slides and tutorial questions will be made available to you at the beginning of the week through the Moodle course page. It is expected that students will have completed the tutorial problems prior to Thursday's tutorial.

[View class timetable](#)

Timetable

Date	Type	Content
Week 1: 14 February - 18 February	Lecture	Topic: Dairy (milk, butter, cheese and ice cream)
	Tutorial	Topics: Introduction to the course, assessment requirements and dairy.
Week 2: 21 February - 25 February	Lecture	Topics: Fats and Oils, Sugar.
	Tutorial	Topic: Fats and Oils, Sugar
Week 3: 28 February - 4 March	Lecture	Topic: Fruits and Vegetables
	Tutorial	Topic: Fruits and Vegetables
	Assessment	Moodle Quiz 1 (10%) will test the following topics: dairy, fats and oils, and sugar.
Week 4: 7 March - 11 March	Lecture	Topic: Cereals
	Tutorial	Topic: Cereals
Week 5: 14 March - 18 March	Lecture	Topic: Meat and Smallgoods
	Tutorial	Topic: Meat and Smallgoods
	Assessment	Moodle Quiz 2 (10%) will test the following topics: cereals, fruits and vegetables.
Week 6: 21 March - 25 March	Homework	FLEXIBILITY WEEK (no classes). Please feel free to use this week to catch up on any outstanding course content or assessment preparation.

Week 7: 28 March - 1 April	Lecture	Topic: Fish/Marine Products, Eggs.
	Tutorial	Topic: Fish/Marine Products, Eggs.
Week 8: 4 April - 8 April	Lecture	Topic: Soybeans, Tea, Coffee and Chocolate.
	Tutorial	Topic: Tea, Coffee and Chocolate.
Week 9: 11 April - 15 April	Lecture	Topic: Thermal Processing, Chill-Freeze
	Tutorial	Topic: Thermal Processing, Chill-Freeze
	Assessment	Moodle Quiz 3 (10%) will test the following topics: meat and smallgoods, fish/marine products, eggs, tea, coffee, soybeans and chocolate.
Week 10: 18 April - 22 April	Lecture	Topic: Dehydration, Chemical Preservatives, Hurdle Technologies.
	Tutorial	Topic: Dehydration, Chemical Preservatives, Hurdle Technologies.
	Assessment	The Moodle Forum Activity (20%) will be open this week on your Moodle course page.

Resources

Prescribed Resources

Due to the recent rise in Omicron cases in NSW, this course will be delivered in a hybrid/online format. This is to allow students to easily access the course content remotely while either overseas or isolating at home. It is therefore expected that students will have access to the appropriate resources for online learning. Please see the UNSW eLearning and IT support page for more details, including the system requirements for using Moodle (<https://www.student.unsw.edu.au/moodle-system-requirements>).

Recommended Resources

There is no single textbook that covers all the material given in this course. However, a number of different ebooks and journal articles will be made available to you through the Moodle course page. Excellent research and review articles discussing topics covered in this course are available from a range of journals. Students aiming for higher grades should consult these journals. Some of the key journals are:

- Food Technology
- Trends in Food Science and Technology
- Journal of Cereal Science
- Journal of Food Science
- Journal of Meat Science
- Food Chemistry
- Postharvest Biology and Technology

All these journals can be accessed electronically through the UNSW Library website.

Other helpful texts include:

Potter, N. & Hotchkiss, J. 1995. Food Science, 5th ed. Springer

Cereal science and technology

Delcour, J.A. & Hoseney, R.C. 2009. Principles of Cereal Science and Technology. AACC International.

Kulp, K., Joseph G. & Ponte, J.G. (ed) 2000. Handbook of Cereal Science and Technology, 2nd ed. Marcel Dekker Inc.

Stanley P., Cauvain, S.P. & Young, L.S. 2007. Technology of Breadmaking, 2nd ed. Springer.

MacRitchie, F. 2010. Concepts in Cereal Chemistry. Taylor & Francis.

Serna-Saldivar, S. O. 2010. Cereal Grains: Properties, Processing, and Nutritional Attributes. Taylor & Francis.

Dairy science and technology

Walstra, P., Wouters, J.T.M. & Geurts, T.J. 2006. Dairy Science and Technology, 2nd ed. Taylor & Francis.

Tamime, A.Y. (ed.) 2009. Dairy Fats and Related Products. Blackwell Publishing Ltd.

Roginski, H., Fuquay, J.W. & Fox, P.F. 2002. Encyclopaedia of Dairy Science. Academic Press.

Fox, P.F., McSweeney, P.L.H., Cogan, T.M. & Guinee, T.P. (eds.) 2004. Cheese: Chemistry, Physics, and Microbiology. Vol. 1, General Aspects. Elsevier.

Fox, P.F., McSweeney, P.L.H., Cogan, T.M. & Guinee, T.P. (eds.) 2004. Cheese: Chemistry, Physics, and Microbiology. Vol. 2, Major Cheese Groups. Elsevier.

Park, Y.W. (ed.) 2009. Bioactive Components in Milk and Dairy Products. Wiley-Blackwell.

Fruit and vegetables

Thompson, A.K. 2003. (ed.) Fruit and Vegetables: Harvesting, Handling and Storage. Blackwell Publishing.

Barkai-Golan, R. (ed.) 2001. Postharvest Diseases of Fruits and Vegetables: Development and Control. Elsevier.

Watson, R.R. & Preedy, V.R. (eds.) 2009. Bioactive Foods in Promoting Health: Fruits and Vegetables. Academic Press.

Martín-Belloso, O. & Fortuny, R.S. (eds.) 2011. Advances in Fresh-Cut Fruits and Vegetables Processing. CRC Press.

Hui, Y.H. (ed.) 2006. Handbook of Fruits and Fruit Processing. Blackwell Publishing.

Nirmal K. & Sinha, N.K. (eds.) 2011. Handbook of Vegetables and Vegetable Processing. Wiley-Blackwell.

Meat Science

Lawrie, R.A. 1998. Lawrie's Meat Science, 6th ed. Woodhead Publishing Ltd. Cambridge, UK.

Warriss, P.D. 2010. Meat Science: An Introductory Text, 2nd ed. CABI, UK.

North American Meat Processors Association. 2007. The Meat Buyer's Guide: Beef, Lamb, Veal, Pork and Poultry. Wiley.

Tarté, R. (ed.) 2009. Ingredients in Meat Products: Properties, Functionality and Applications. Springer.

Toldrá, F. (ed.) 2010. Handbook of Meat Processing. Wiley-Blackwell.

Seafood and eggs

Sen, D.P. (ed.) 2005. Advances in Fish Processing Technology. Allied Publishers Private Ltd.

Hall, G. (ed.) 2011. Fish Processing: Sustainability and New Opportunities. Wiley-Blackwell.

Alasalvar, C., Miyashita, K. & Shahidi, F. (eds.) 2011. Handbook of Seafood Quality, Safety and Health Applications. Wiley-Blackwell.

Stadelman, W.J. & Cotterill, O.J. 1995. Egg Science and Technology. The Haworth Press.

Lipids, sugar and confectionary

Akoh, C.C. & Min, D.B. 2008. Food Lipids: Chemistry, Nutrition and Biotechnology. CRC Press.

O'Brien, R.D. 1998. Fats and Oils: Formulating and Processing for Applications. Technomic Pub. Co.

Birch, G.G. 1999. Sugar: Science & technology. Applied Science Pub.

Afoakwa, E.O. 2011. Chocolate Science and Technology. Wiley-Blackwell.

Edwards, W.P. 2000. The Science of Sugar Confectionery. Royal Society of Chemistry

Coffee, tea and soybean

Wintgens, J.N. (ed.) 2009. Coffee: Growing, Processing, Sustainable Production: A Guidebook. Wiley-VCH.

Cu. Y. (ed.) 2012. Coffee: Emerging Health Effects and Disease Prevention. Wiley-Blackwell.

Ho, C., Lin, J. & Shahidi, F. 2008. Tea and Tea Products: Chemistry and Health-Promoting Properties. CRC Press.

Liu, K. 1997. Soybeans: Chemistry, Technology and Utilization. Aspen Publication.

Endres, J.G. 2001. Soy Protein Products: Characteristics, Nutritional Aspects, and Utilization. American Oil Chemists' Society Press.

Food Preservation

Fellow, P.J. 2000. Food Processing Technology: Principles and Practice, 2nd ed. Cambridge: Woodhead Publishing Ltd.

Rahaman, M.S. (ed.) 2007. Handbook of Food Preservation, 2nd ed. CRC Press.

Tewari, G. & Juneja, V. K. (eds.) 2007. Advances in Thermal and Non-thermal Food Preservation. Blackwell Publishing.

Tucker, G.S. (ed.) 2008. Food Biodeterioration and Preservation. Blackwell Publishing.

Course Evaluation and Development

General feedback from assessments will be given via Moodle. Challenge questions will be posted on Moodle for consideration in preparing for the final exam. Tutorial challenge questions are provided to help students test the depth of their topic understanding. Students are also given time during the tutorial

sessions to ask questions and/or query any concepts that need clarification from the course material. If students have any specific problems or questions, meetings with the course conveyor can be requested via email or Microsoft Teams.

Student feedback is extremely valuable and students are expected to provide feedback on the course. A Moodle tool has been created on the course web page (which will become visible late in the session) to allow you to evaluate the course. Previous student feedback prompted the re-organization of the lecture topics to align with FOOD3020/8020 FST Laboratory as complementary courses. Appropriate alignment of the lecture and lab content has also helped assist student learning in the laboratory course.

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 generally not required; 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 due respect. Presenting results clearly gives the marker the best chance of understanding your method; even if the numerical results are incorrect.

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.

Late penalties

Unless otherwise specified, submissions received after the due date and time will be penalised at a rate of 5% per day or part thereof (including weekends). For some activities including Moodle quizzes and Team Evaluation surveys, extensions and late submissions are not possible.

Special consideration

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 submitting an assessment or sitting an exam.

UNSW 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 need to provide some documentary evidence to support absences from any assessments missed because of COVID-19 public health measures such as isolation. UNSW will **not** be insisting on medical certificates for COVID-related absences of 7 days or less, with the positive PCR or RAT result being sufficient. Longer absences due to self-isolation or COVID-related illness will still need documentation such as a medical certificate.

Applications for special consideration **will still be required** for assessment and participation absences related to COVID-19. Special consideration requests should not be lodged for missing classes if there are no assessment activities in that class.

Academic Honesty and Plagiarism

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>.

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.

Academic Information

To help you plan your degree, assistance is available from academic advisors in [The Nucleus](#) and also in the [School of Chemical Engineering](#).

Additional support for students

- [Current Student Gateway](#)
- [Engineering Current Student Resources](#)
- [Student Support and Success](#)
- [Academic Skills](#)
- [Student Wellbeing, Health and Safety](#)
- [Equitable Learning Services](#)
- [IT Service Centre](#)

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.

On-campus class attendance

Physical distancing recommendations must be followed for all face-to-face classes. To ensure this, only students enrolled in those classes will be allowed in the room. Class rosters will be attached to corresponding rooms and circulated among lab demonstrators and tutors. No over-enrolment is allowed in face-to-face class. Students enrolled in online classes can swap their enrolment from online to a **limited** number of on-campus classes by Sunday, Week 1.

In certain classroom and laboratory situations where physical distancing cannot be maintained or the staff running the session believe that it will not be maintained, face masks will be designated by the course coordinator as **mandatory PPE** for students and staff. Students are required to bring and use their own face mask. Mask can be purchased from IGA Supermarket (Map B8, Lower Campus), campus pharmacy (Map F14, Middle Campus), the post office (Map F22, Upper Campus) and a vending machine in the foyer of the Biological Sciences Building (Map E26, Upper Campus).

Your health and the health of those in your class is critically important. You must stay at home if you are sick or have been advised to self-isolate by [NSW health](#) or government authorities. Current alerts and a list of hotspots can be found [here](#). Do not come to campus if you have any of the following symptoms: fever (37.5 °C or higher), cough, sore throat, shortness of breath (difficulty breathing), runny nose, loss of taste, or loss of smell. If you need to have a COVID-19 test, you must not come to campus and remain in self-isolation until you receive the results of your test.

You will not be penalised for missing a face-to-face activity due to illness or a requirement to self-

isolate. We will work with you to ensure continuity of learning during your isolation and have plans in place for you to catch up on any content or learning activities you may miss. Where this might not be possible, an application for fee remission may be discussed. Further information is available on any course Moodle or Teams site.

For more information, please refer to the FAQs: <https://www.covid-19.unsw.edu.au/safe-return-campus-faqs>

Image Credit

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Acknowledgement of Country

We acknowledge the Bedegal people who are the traditional custodians of the lands on which UNSW Kensington campus is located.