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## CHEM215: Food Chemistry

### Subject Outline

6 credit points

### Subject Information

Autumn, 2025, Wollongong  
On Campus

**On-Campus Delivery** This subject is delivered in-person and includes on-campus or other location-based learning activities that cannot be undertaken by students studying Online/Distance. Students unable to attend campus or any other nominated physical delivery location should not enrol in this subject.

Subjects with a delivery mode of On Campus and/or Flexible with International Student enrolments will be delivered in accordance with the ESOS National Code. That is, online learning experiences (such as lectures, tuition, and resources) will be supplementary to in-person learning experiences such as scheduled classes and/or scheduled contact hours.

*UOW may need to change teaching locations, teaching delivery and/or assessment delivery at short notice to ensure the safety and well-being of students and staff in response to the COVID-19 pandemic or other public health requirements.*

### The Faculty of Science, Medicine and Health

The Faculty of Science, Medicine and Health offers a range of undergraduate and postgraduate programs designed to meet the needs of a diverse student population. We carry out world-leading research which is strongly aligned with our teaching program

As a student of our faculty, you will be actively engaged in learning with extensive clinical experiences, use of advanced educational technologies and opportunities for enriching work experience. More information about the Faculty of Science, Medicine and Health and our School is available on our web pages:  
<https://www.uow.edu.au/science-medicine-health/>

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### Teaching Staff

Teaching Role	Coordinator
Name	Dr Giel Muller
Telephone	+61 2 4394 149
Email	<a href="mailto:gmuller@uow.edu.au">gmuller@uow.edu.au</a>
Room	18.115
Consultation Times	Email for an appointment

<b>Teaching Role</b>	Lecturer
<b>Name</b>	Dr Giel Muller
<b>Telephone</b>	+61 2 4239 4149
<b>Email</b>	<a href="mailto:gmuller@uow.edu.au">gmuller@uow.edu.au</a>
<b>Room</b>	18.115
<b>Consultation Times</b>	Email for an appointment

<b>Teaching Role</b>	Lecturer
<b>Name</b>	Ms Emily Luks
<b>Telephone</b>	+61 2 4239 4349
<b>Email</b>	<a href="mailto:eluks@uow.edu.au">eluks@uow.edu.au</a>
<b>Room</b>	18.216
<b>Consultation Times</b>	Email for an appointment

<b>Teaching Role</b>	Lecturer
<b>Name</b>	Prof Paul Keller
<b>Telephone</b>	0242214692
<b>Email</b>	<a href="mailto:keller@uow.edu.au">keller@uow.edu.au</a>
<b>Room</b>	18.218
<b>Consultation Times</b>	Email for an appointment

## Expectations of Students

UOW values are intellectual openness, excellence and dedication, empowerment and academic freedom, mutual respect and diversity, recognition and performance. We will provide a safe, equitable and orderly environment for the University community, and expect each member of our community to behave responsibly and ethically ([Student Conduct Rules](#)).

We expect that students demonstrate these values and professional behaviour, both face to face and online, making genuine efforts to complete their studies successfully, arriving on time to class, taking part constructively in class discussions and activities, demonstrating appropriate professional and ethical conduct in all communication with UOW staff and community members, and submitting assignments on time (or completing a request for Academic Consideration in advance if needed).

### Guiding Communication Principles for Students

**Moodle** Announcements will be the primary platform for communication of general information to students

- Students should ensure they regularly check the main announcements forum at the top of each subject's Moodle site.
- It is the student's responsibility to check all subject Moodle sites regularly for information and notifications.

**SOLS messages** will be used for all central communication relating to the following:

- Administrative matters relating to student enrolment
- Critical information relating to course or subject, e.g. Changes to assignments, policy updates, class cancellations or changes
- Timetable information
- Security and emergency information
- Students are encouraged to check SOLS messages daily as these messages are often of high priority

SOLS and Moodle announcements can NOT be responded to.

### Email

- Communication to UOW staff by students should only be via a UOW email account
- If you have a question of a general nature in relation to assessment questions, Moodle assignment forums should be used rather than email

Remember to use the same principles when communicating online as you would face-to-face. Be clear and respectful and communicate with the same consideration you would expect from others.

### Related Policies

- Online and email etiquette <https://tr.uow.edu.au/uow/file/976ffde2-b892-42cf-b20b-5c7a65bc08cc/1/Overview%20of%20Online%20and%20Email%20Etiquette.pdf>
- Using UOWmail <https://www.uow.edu.au/student/support-services/academic-skills/>
- Inclusive language guideline <https://documents.uow.edu.au/about/policy/students/UOW140611.html>
- The Student Charter <https://www.uow.edu.au/student/charter/>

### Appropriate Online Behaviour

The University is committed to providing a safe, respectful, equitable and orderly environment for the University community, and expects each member of that community to behave responsibly and ethically. Students must comply with the University's [Student Conduct Rules](#) and related policies including the [IT Acceptable Use Policy](#) and [Bullying Prevention Policy](#), whether undertaking their studies face-to-face, online.

For more information on appropriate communication and etiquette in the online environment please refer to the guide [Online and Email Etiquette](#).

## **Related Policies**

Using UOWmail <https://www.uow.edu.au/student/support-services/academic-skills/>

Inclusive language guideline <https://policies.uow.edu.au/document/view-current.php?id=239>

## **Copyright**

**Commonwealth of Australia**

Copyright Regulations 1969

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Hardcopies of this document are considered uncontrolled please refer to your Moodle site for the latest version.

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# Section A: General Information

## Learning Outcomes

### Subject Learning Outcomes

On successful completion of this subject, students will be able to:

1. Describe the nutrients in food
2. Compare the chemical structures of nutrients (fats, proteins, carbohydrates, vitamins and minerals) and explain their different properties/uses and how they relate to the cooking and processing of foods;
3. Describe and perform basic chemical laboratory procedures to analyze food components
4. Explain food processing and preservation techniques & toxicology
5. Examine the role of biotechnology in producing new/improved food products.
6. Describe native food and medicinal plants used by the Dharawal and Wodi Wodi Aboriginals of the Illawarra

### Subject Description

This subject focuses on nutrition science and begins with an exploration into proteins, fats, and carbohydrates in foods, providing the basis for understanding nutrients and energy value. We investigate basic properties and roles of vitamins, minerals, and the effects of food additives and processing. Additionally, the lecture series features an introduction to the core principles of toxicology, as well as native plants and their uses by the Dharawal and Wodi Wodi First Nations people of the Illawarra. Throughout the subject, the fundamental components of foods will be determined and analysed in the laboratory using a suite of experimental techniques, equipment, and effective groupwork. Techniques include thin layer chromatography (TLC), titration, quantitative transfer and analysis, gravity and vacuum filtration, sample preparation and dilution and separation, chemical (pigment) extraction, UV-vis spectroscopy, and high-performance liquid chromatography (HPLC).

### Course Handbook

Information about subject pre-requisites, co-requisites and restrictions as well as course completion requirements and Course Learning Outcomes can be found in the [Course Handbook](#).

## Subject Details: Practical Activities, eLearning, Readings and Materials

### Subject eLearning

The University uses the eLearning system Moodle to support all coursework subjects. The subject Moodle site can be accessed via your SOLS page.

### Safety Guidelines

The rules below are general rules that are required when participating in labs, practicals, fieldwork or simulated fieldwork activities. Before commencing these activities you are to ensure that you understand specific procedures and policy related to safety.

- All first year students undertaking Chemistry (CHEM101/102/104/105) must complete the Moodle WHS Induction (see details below)
- Before commencing lab/practical/fieldwork activity you are to ensure that you understand specific procedures and policy related to safety.
- You may need to review a Risk Assessment and complete a Participant Acknowledgement form before commencing any fieldwork/practical work. These materials will be made available by the supervisor/Subject Coordinator.
- You must inform the Subject Coordinator of any medical conditions which may impact upon your ability to participate in these activities before commencing the practical.

- All Reasonable Adjustment cases (Access Plans) must be discussed with the Subject Coordinator prior to commencing the activity.
- Participation in the lab/practical/field/simulation activities may be denied to students who do not abide by these, and other conditions which may be specified by the Subject Coordinator.
- Never use any equipment or attempt any experiment without checking the safety implications with your laboratory supervisor or experienced delegated laboratory worker
- Undergraduate students are not permitted to work after hours unless there is appropriate approval and supervision.
- For subjects including field trips, students may be required to contribute to costs associated with the provision of field trips that form part of the course of study.

## **FOUNDATIONAL Work Integrated Learning**

This subject contains elements of 'Foundational WIL'. Students in this subject will observe, explore or reflect on possible career pathways or a work-related aspect of their discipline.

### **Additional Subject Details**

#### **SAFETY IN THE LABORATORY**

The Chemical Laboratory is a potentially dangerous place; it contains flammable solvents, fragile glassware and poisonous chemicals. However, with reasonable care, there need be no mishaps. **It is essential that you read the practical notes before entry into the laboratory.**

#### **SAFETY GLASSES MUST BE WORN AT ALL TIMES IN THE LABORATORY**

Concentrated sulfuric acid, concentrated caustic soda or flying glass cause blindness instantly and eye protection is effective against these hazards.

**Persons without eye protection will be required to leave the laboratory.**

#### **FIRE**

##### **MOST ORGANIC SOLVENTS BURN OR EXPLODE**

Small fires are best smothered by placing a book or wet cloth over the burning object to exclude air. In the case of a person's clothing catching fire, use a fire blanket to smother the flames.

#### **POISONS**

##### **MOST CHEMICALS USED IN THE LABORATORY ARE POISONS**

Poisoning may be either acute, due to a single large dose, or chronic due to small regular doses. Some poisons are cumulative, e.g. heavy metals. Solids may be ingested or inhaled, particularly those which occur as fine powders. Liquids may be absorbed through the skin or their vapours inhaled, and consequently, are potentially more dangerous than solids. Avoid inhaling vapours from the common solvents, in particular, benzene, carbon tetrachloride and pyridine. The safety data sheets for all chemicals used in the experiments can be found on the Moodle site under "laboratory resources".

**You MUST read the relevant data before each experiment.**

#### **OTHER POINTS**

1. Any accidents, however apparently trivial, should be reported to the person in charge at once.
2. Eating and Drinking is forbidden for health reasons.
3. Smoking is forbidden as it constitutes a health and fire hazard.
4. **Totally ENCLOSED footwear and laboratory coats** must be worn in the laboratory. This means NO thongs, NO sandals, NO open top court shoes and NO shoes that are not enclosed at the back. **Students will be excluded from the lab for inappropriate footwear and given a mark of zero for that practical session.**
5. **Safety glasses must be worn in the laboratory at all times.**
6. Maintain your bench in a clean and tidy condition.
7. Preparative organic experiments should generally be carried out in a fume cupboard.
8. Never use force when manipulating glassware. Lubricate glass tubing with water or grease when connecting it to rubber tubing. This includes pipettes and pipette bulbs.



- Familiarize yourself with the locations of the First Aid kit, fire extinguishers, fire blankets, and the exits from the laboratories and the building. In the instance of an emergency evacuation follow the instructions of your demonstrator.

**Please note point 4 and 5 carefully.**

**Failure to comply with these rules may mean exclusion from the laboratory.**

### Using Generative Artificial Intelligence (GenAI)

GenAI technology (such as ChatGPT or Microsoft Co-pilot) is reshaping the University experience worldwide. UOW is committed to embracing GenAI as a tool to enhance learning experiences and develop vital work-readiness skills. However, misuse or use of GenAI in assessments where prohibited constitutes academic misconduct (as specified by [University Policy](#)).

**It is important that students check if GenAI is permitted** for each assessment task and how it is to be used and acknowledged. Please read the [student guidance](#) available on how to use GenAI ethically and critically, equally recognising its capabilities and limitations. For example:

- Generative AI is not a substitute for decision-making:** GenAI should complement, not replace, your critical thinking and decision-making skills.
- Output quality depends on prompts:** The quality of GenAI outputs is influenced by prompting. Poorly constructed or unclear prompts may generate outputs that are incorrect.
- Fact verification is essential:** GenAI outputs can be fabricated, presenting inaccurate information or contain harmful bias. Verify all GenAI outputs against reliable sources.
- Protect data and copyright:** Many GenAI technologies collect information in ways that breach privacy and data protection provisions, particularly where the source material is confidential or subject to copyright. Please check the Terms and Conditions of GenAI technologies and if unsure, contact [UOW Copyright Guidance](#). Learn more about how to access UOW secured GenAI tools [here](#).
- Transparency in use:** Where required, you must acknowledge GenAI use, including providing prompt histories and detailing how GenAI was utilised.
- Thoughtful and appropriate application:** Be mindful of when and how to use GenAI tools. Assess its appropriateness for each use, and refrain from use when not suitable.

If you have any questions, please contact your Subject Coordinator.

### Major Text(s)

No texts are required. The following text is recommended:

### Understanding the Science of Food: From molecules to mouthfeel

by Sharon Croxford and Emma Stirling.

First Published 2017 by Routledge, London.

If there is a textbook available for purchase, you can find the details at University Bookshop

<https://unishop.uow.edu.au/>

### Recommended Readings and Other Resources

The following textbook is recommended:

*Understanding the Science of Food* by Sharon Croxford & Emma Stirling, Allen & Unwin Pty Ltd, 2017.

PDF files containing lecture slides will be available. These should be regarded as *complementary* to the lectures, not a *substitute* for the lectures.

This is not an exhaustive list of references. Students should also use the library catalogue and databases to locate additional resources.

## Lectures, Tutorials and Attendance Requirements

### Lecture Times \*

UOW may need to change teaching locations, teaching delivery and/or assessment delivery at short notice to ensure the safety and well-being of students and staff in response to the COVID-19 pandemic or other public health requirements.

Up to date timetable and delivery information is located at

<http://www.uow.edu.au/student/timetables/index.html>

You can access your personal timetable by logging into SOLS and selecting 'My Timetable'

### Lecture Program \*

Week	Commencing	Topics Covered	Readings
1	03 Mar 2025	Introduction and Proteins	
2	10 Mar 2025	Proteins	Lab 1: Vitamin C
3	17 Mar 2025	Fats	
4	24 Mar 2025	Fats	Lab 2: Oils and Fats
5	31 Mar 2025	Carbohydrates	
6	07 Apr 2025	Carbohydrates	Lab 3: Enzymic Browning
7	14 Apr 2025	Mid-semester quiz (during lecture time)	
	21 Apr 2025	<b>Mid-Session Recess</b>	
8	28 Apr 2025	Native plants as food and medicine	Lab 4 or 5 (split lab, check Moodle); Lab 4: Plant Pigments; Lab 5: Caffeine
9	05 May 2025	Food Processing	
10	12 May 2025	Food Processing and Additives	Lab 4 or 5 (split lab, check Moodle); Lab 4: Plant Pigments; Lab 5: Caffeine
11	19 May 2025	Food Additives and Toxicology	
12	26 May 2025	Vitamins and Minerals	Lab 5 Checkpoint due Monday Lab 5 workshop and submission at end of lab
13	02 Jun 2025	Vitamins and Minerals + Revision Tutorial	
	09 Jun 2025	<b>Study Recess</b>	
	14 Jun 2025	<b>Examinations</b>	
	21 Jun 2025	<b>Examinations</b>	

\* The above times and program may be subject to change. Students will be notified of any change via SOLS.

### Additional Lecture Comments

**Overview of types of nutrients, sources, role in nutrition (1 L).**

**Proteins (4 L)** - types, structure, function. Coagulation and denaturation. Effect of cooking.

**Fats and oils (6 L)** – Structures and relationships to physical properties and nutrition; reactions of fats and effect on properties; characterisation of fats.

**Carbohydrates (6 L)** – Structure: monosaccharides, disaccharides and polysaccharides, isomers, properties of sugars, effect of cooking, common reactions.

**Native plants as food and medicine (2L)** - used by the Dharawal and Wodi Wodi First Nations people

**Food processing and preservation** (5 L) - sterilisation, irradiation, freezing, dehydration, etc.  
**Additives in food** (3 L) – preservatives, colours, hormones  
**Toxicology** (1 L)  
**Vitamins and minerals** (4 L)  
**Revision Tutorial** (2 T)

## **Recording of Teaching and Learning Activities**

The University of Wollongong supports the recording of UOW educational content as a supplemental study tool, to provide students with equity of access, and as a technology-enriched learning strategy to enhance the student experience.

If you make your own recording of a lecture, class, seminar, workshop or any other educational session provided as part of your course of study you can only do so with the explicit permission of the lecturer and those people who are also being recorded.

You may only use educational content recorded through the delivery of subject or course content, whether they are your own or recorded by the university, for your own educational purposes. Recordings cannot be altered, shared or published on another platform, without permission of the University, and to do so may contravene the University's Copyright Policy, Privacy Policy, Intellectual Property Policy, IT Acceptable Use Policy and Student Conduct Rules. Unauthorised sharing of recordings may also involve a breach of law under the Copyright Act 1969.

Most lectures in this subject will be recorded, when they are scheduled in venues that are equipped with lecture recording technology and made available via the subject Moodle site within 48 hours.

## **Your Privacy - Recording of Teaching and Learning**

In accordance with the Student Privacy & Disclosure Statement, and Lecture Recording Procedures when undertaking our normal teaching and learning activities, the University may collect your personal information. This collection may occur incidentally during the recording of lectures in equipped venues (i.e. when your identity can be ascertained by your image, voice or opinion), or via the delivery of online content therefore the University further advises students that:

- Lecture recordings are made available to students, university staff, and affiliates, securely via the Learning Platform;
- Recordings are made available only for the purpose for which they were recorded, for example, as a supplemental study tool or to support equity and access to educational resources;

If you have any concerns about the use or accuracy of your personal information collected in a lecture recording, you may approach your Subject Coordinator to discuss your particular circumstances.

The University is committed to ensuring your privacy is protected. If you have a concern about how your personal information is being used or managed, please refer to the University's Privacy Policy or consult our Privacy webpage <https://www.uow.edu.au/privacy/>

## **Recent Improvements to Subject**

The Faculty of Science, Medicine and Health is committed to continual improvement in teaching and learning and takes into consideration student feedback from many sources including, direct student feedback to tutors and lecturers and responses to the Subject and Course Evaluation Surveys.

## **Extraordinary Changes to the Subject Outline**

In extraordinary circumstances the provisions stipulated in this Subject Outline may require amendment after the Subject Outline has been distributed. All students enrolled in the subject must be notified and have the opportunity to provide feedback in relation to the amendment, where practicable, prior to the amendment being finalised.

## **Learning Analytics**

Learning Analytics data (such as student engagement with Moodle, access to recorded lectures, University Library usage, task marks, and use of SOLS) may be used by the Subject Coordinator and your faculty's Head of Students to assist in analysing student engagement, and to identify and recommend support to students who may be at risk of failure. If you have questions about the kinds of data the University uses, how we collect it, and how we protect your privacy in the use of this data, please refer to <https://www.uow.edu.au/privacy/>

## Section B: Assessment

### Assessment Summary

Assessment Item	Form of Assessment	%
Assessment 1	Quiz	25%
Assessment 2	Lab/Prac/Simulation	35%
Assessment 3	Exam	40%
	<b>TOTAL MARKS</b>	100%

**Please note:** Copies of student work may be retained by the University in order to facilitate quality assurance of assessment processes.

A formative assessment activity (with written or verbal feedback) will be conducted before census date - please see [UOW Key Dates](#).

### Assessment 1: Quiz - Food Chemistry Quiz

<b>Marking Criteria</b>	Multiple choice
<b>Length</b>	50 minutes
<b>Weighting</b>	25%
<b>Assessment Due</b>	Week beginning 14 Apr 2025 (In lecture in Session Week 7)
<b>Type of Collaboration</b>	Individual assessment
<b>Style and format</b>	During Week 7 lecture
<b>Assessment submission</b>	Quiz papers and answers must be submitted at the conclusion of the quiz.
<b>Assessment return</b>	General feedback provided in review lectures, Moodle.
<b>Detailed information</b>	Students with approved AC application may sit assessment during alternate timeslot in Week 7.

### Assessment 2: Lab/Prac/Simulation - Practical Assessments

<b>Marking Criteria</b>	The practicals will be carried out accordingly: Experiment 1 (5%) 12-13/3 (Week 2) Vitamin C Content of Cabbage Experiment 2 (5%) 26-27/3 (Week 4) Oils and Fats Experiment 3 (5%) 9-10/4 (Week 6) Enzymic Browning Experiment 4 (5%) 30/4-1/5 (Week 8 or 10) Pigments in Plant Materials Experiment 5 (15%) 14/5-15/5 (Week 8 or 10) Isolation of Caffeine from Tea and Coffee
<b>Weighting</b>	35%
<b>Assessment Due</b>	12 Mar 2025 (Wednesday in Session Week 2) 26 Mar 2025 (Wednesday in Session Week 4) 09 Apr 2025 (Wednesday in Session Week 6) 30 Apr 2025 (Wednesday in Session Week 8) 14 May 2025 (Wednesday in Session Week 10) 28 May 2025 (Wednesday in Session Week 12)
<b>Type of Collaboration</b>	Individual assessment
<b>Style and format</b>	<b>Experiments 1, 2, 3 and 4 are to be written up in the templates that are provided in the subject manual. They are submitted at end of lab class.</b> Experiments 4 and 5 will be carried out with 1/2 the class performing Lab 4 and the other 1/2 performing Lab 5 over Weeks 8 and 10. Experiment 5 will be written up as a full practical report and submitted alongside a "supplemental information" booklet containing handwritten

	workings. For all students, Lab 5 output will be submitted at end of Week 12 lab class.
<b>Assessment submission</b>	Paper submission
<b>Assessment return</b>	Within 21 days of due date
<b>Detailed information</b>	<p><b>Reaching at least 50% mark across the laboratory assessments, with at least 4 of the 5 labs carried out and submitted, is a hurdle requirement.</b></p> <p>Non-exhaustive list of <i>technical</i> skills in the labs:  Lab 1 --&gt; Titration and analytical measurement, processing;  Lab 2 --&gt; Saponification, heating, preparing solutions, standardization, filtration;  Lab 3 --&gt; Sample preparation, qualitative analysis;  Lab 4 --&gt; Thin Layer Chromatography (TLC), UV-vis spectrophotometry;  Lab 5 --&gt; HPLC analysis, UV-vis spectrophotometry, chemical separation techniques, data procurement and processing, scientific literacy and communication;</p> <p>The above technical skills are mastered in conjunction with soft skills, including the ability to apply theoretical concepts to real-world practice and analyzing where and why experimental results deviate from theoretical expectations. Where technical and soft skills overlap with those attained in First Year chemistry or elsewhere, there is an expectation of greater proficiency and demonstration of mastery.</p> <p>Exemption/consideration for missing one lab class may only be applied in special circumstances at the discretion of the subject coordinator(s).  Maximum of one exemption to be granted per student to satisfy completion of at least 4 of 5 labs and ensure skills mastery.</p> <p>Exemption may be granted to any one of Labs 1-4 in lieu of attendance + submitting completed template:  Adjusted marking allocation accounting for <i>one, excused lab (1-4) through approved AC</i>:  Labs 1-4 (3x): <b>6%</b>  Lab 5: <b>17%</b>  <i>Exemption from Lab 5 (caffeine) may only be granted for attendance; student must still produce and submit full report using data provided:</i>  Labs 1-4 (4x): <b>6%</b>  Lab 5 output (booklet and report) only: <b>11%</b>  All unexcused absences or missed assignments are awarded marks of "0".</p>

### Assessment 3: Exam - Final Examination

<b>Marking Criteria</b>	Multiple Choice/short answer.
<b>Length</b>	3 hours
<b>Weighting</b>	40%
<b>Assessment Due</b>	The final exam will be held during the UOW exam period, and students should ensure they are available during this period. Students will receive a SOLSmail advising when full details of the delivery format, and date of the final exam are available in the SOLS Exam Timetable.
<b>Type of Collaboration</b>	Individual assessment
<b>Style and format</b>	On-campus, supervised exam.
<b>Detailed information</b>	<p>Short answer/multiple choice;  On-campus, in-person exam to be scheduled nearer to the date and communicated via SOLS.</p> <p>Allowed materials and resources to be outlined by subject coordinator at least 2 weeks prior to the final exam.</p> <p>UoW approved calculators only. Cell phones and other internet-compatible devices are not allowed.</p>

## Minimum Requirements to Pass this Subject

**Clear Pass:** To obtain a *clear* pass ("P") or higher grade ("C", "D", "HD") in this subject, a student must achieve *both*:

- (i) a total *final* mark of  $\geq 50\%$  (Subject Learning Outcomes 1, 2, 3, 4, 5, 6) and
  - (ii) an average laboratory mark of  $\geq 50\%$  with *at least 4* of the 5 labs carried out and submitted (Subject Learning Outcome 3). Failure to meet this minimum performance requirement may lead to a Technical Fail, TF.
- \*Academic Consideration approval may lead to exemption (Labs 1-4 only) or rescheduling of laboratory assessment. The assessed work of Lab 5 is produced across multiple weeks; a portion may be exempted whereas the final product (including report) usually cannot. See Assessment section above for adjusted weightings due to an approved Academic Consideration application. Note, only one Academic Consideration (AC) application may be approved for a lab by the Subject Coordinator and hurdle requirement (ii) above must still be satisfied for a clear chance of a passing mark.

### Hurdle Assessment

Subjects may include a hurdle assessment. A hurdle assessment is an assessment that requires a minimum level of performance as a condition for passing the subject. Examples include, achievement of a pass grade or above in a skills-based assessment or final examination. Hurdle assessments are applied to subjects to ensure students:

1. meet learning outcomes
2. demonstrate you can complete a task safely and/or meet professional standards.

For more on hurdle assessments see the Assessment and Feedback Policy [Section 8: Hurdle Assessments \(50-51-52\)](#).

Should this subject contain a hurdle assessment, it will be stated under the specific assessment in Section B: Assessments.

### UOW Grade Descriptors

The UOW Grade Descriptors are general statements that communicate what our grades represent, in terms of standards of performance, and provide a frame of reference to ensure that assessment practice across the University is appropriate, consistent and fair. Grade Descriptors are expressed in general terms so that they are applicable to a broad range of disciplines. Grade Descriptors are available here <https://www.uow.edu.au/student/exams/results/>. For more information on the UOW grade descriptors refer to the Teaching and Assessment: Assessment and Feedback Policy: [Teaching and Assessment: Assessment and Feedback Policy](#)

### Assessment Learning Outcome Matrix

Learning Outcomes	Measures - Assessment weighting		
	Food Chemistry Quiz (25%)	Practical Assessments (35%)	Final Examination (40%)
Describe the nutrients in food	✓		✓
Compare the chemical structures of nutrients (fats, proteins, carbohydrates, vitamins and minerals) and explain their different properties/uses and how they relate to the cooking and processing of foods;	✓		✓
Describe and perform basic chemical laboratory procedures to analyze food components		✓	

Learning Outcomes	Measures - Assessment weighting		
	Food Chemistry Quiz (25%)	Practical Assessments (35%)	Final Examination (40%)
Explain food processing and preservation techniques & toxicology			✓
Examine the role of biotechnology in producing new/improved food products.			✓
Describe native food and medicinal plants used by the Dharawal and Wodi Wodi Aboriginals of the Illawarra			✓

## Submission, Retention and Collection of Written Assessment

Assessed work must be handed in by the date and time listed under each assessment task. All assessment tasks must represent the enrolled student's own ORIGINAL work and must not have been previously submitted for assessment in any formal course of study.

### Extensions

Students requesting an extension of time to submit an assessment task, deferred exam or exemption of a compulsory attendance requirement, must apply using Academic Consideration through SOLS. Students must apply before, or on the assessment/s due date and where evidence is required, students must provide evidence no later than three working days after the assessable item's due date for their request to be considered. **For information on the Academic Consideration Policy, eligibility requirements and how to apply, see: <https://www.uow.edu.au/student/admin/academic-consideration/>**

### Late Submission of Assessment Tasks and Penalties

Assessed work must be submitted in by the date and time given. If an assessment is submitted late, it will be marked in the normal way, and a penalty will then be applied.

In the absence of an approved request for Academic Consideration in the form of an extension, assessment tasks must be submitted in line with the assessment instructions.

- An assessment task that is submitted late will receive a penalty of 5% of the total possible marks for each 24-hour period, or part thereof, that it is late.
- Work submitted after seven calendar days will not be marked and will be given a mark of 0.
- No assessment task can be handed in for a mark once the assessment task has been returned to students.
- Penalties accrue on each day that the assessment task is late, including Saturday, Sunday and public holidays

Note: Assessments must still be submitted to meet minimum performance requirements even though no mark is to be awarded.

### Quiz Completion

Where there is a quiz component, any student who has not attempted and submitted a quiz within the specified timeframe will receive 0 (zero) marks for this assessment type. The quiz will not be reopened, and no alternative assessment will be set without extenuating circumstances and an approved academic consideration application. Late penalties do not apply to quizzes. If a student attempts a quiz but for technical issues is not able to submit the quiz, students must show evidence and apply for an academic consideration to sit a supplementary quiz.



## **Collection**

Students will be notified when they can collect or view their marked assessment. In accordance with University Policy marked assessments will usually only be held for 21 days after the declaration of marks for that assessment.

## **Retention**

The university may retain copies of student work in order to facilitate quality assurance of assessment processes, in support of the continuous improvement of assessment design, assessment marking and for the review of the subject. The University retains records of students' academic work in accordance with the University Records Management Policy and the State Records Act 1988 and uses these records in accordance with the University Privacy Policy and the Privacy and Personal Information Protection Act 1998.

## **Scaling**

Marks awarded for any assessment task or part of any assessment task, including an examination may be subject to scaling at the end of the session. Marks will be scaled only when unpredicted circumstances occur and in order to ensure fairness of marking across groups of students. The method of scaling will depend on the type of scaling required by the circumstances. When scaling is deemed necessary, it will follow a detailed consideration by the Unit Assessment Committee and/or the Faculty Assessment Committee of the marks of the group of students concerned. Scaling will not affect any individual student's rank order within their cohort. For more information please refer to [Finalisation of Student Results Policy](#) for details.

## **Supplementary Assessment**

Supplementary assessment may be offered to students whose performance in this subject is close to that required to pass the subject, and are otherwise identified as meriting an offer of a supplementary assessment. For information about eligibility criteria and the form and timing of supplementary assessments see the [Supplementary Assessment Procedure](#)

## **Review and Appeal of Academic Decisions**

A student may request an explanation of a mark for an assessment task or a final grade for a subject consistent with the student's right to appropriate and useful feedback on their performance in an assessment task. A student may also seek further explanation for other academic decisions such as Academic Consideration, Supplementary Assessment or Credit for Prior Learning. If a student is not satisfied with the explanation, or have further concerns, they may have grounds for a formal review. For further information refer to [Review and Appeal of Academic Decisions Policy](#)

## **Assessment Quality Cycle**

The UOW Assessment Quality Cycle provides a level of assurance that assessment practices across the University are appropriate, consistent and fair. Quality assurance activities are undertaken to support the continuous improvement of assessment and promote good practices in relation to assessment design, marking and review of the subject prior to subsequent delivery.

## **Academic Integrity**

The University's Academic Integrity Policy, faculty handbook and subject guides clearly set out the University's expectation that students submit only their own original work for assessment and avoid plagiarising the work of others or cheating. Re-using any of your own work (either in part or in full) which you have submitted previously for assessment is not permitted without appropriate acknowledgement. Plagiarism can be detected and has led to students being expelled from the University.

The use by students of any website that provides access to essays or other assessment items (sometimes marketed as 'resources'), is extremely unwise. Students who provide an assessment item (or provide access to an assessment item) to others, either directly or indirectly (for example by uploading an assessment item to a website) are considered by the university to be intentionally or recklessly helping other students to cheat. Uploading an assessment task, subject outline or other course materials without express permission of the University is considered academic misconduct and students place themselves at risk of being expelled from the University.

Students should visit the following University website and become familiar with the University's policy on plagiarism [Academic Integrity Policy](#)

## **Referencing**

The Author-Date (Harvard) referencing system should, unless otherwise specified for a particular assessment (check Details of Assessment Tasks), be utilised. A summary of the Harvard system can be accessed on the Library website at: <http://uow.libguides.com/refcite>

# Section C: General Advice for Students - Policies and Procedures

## Student Services and Support

There are a range of services available to students that are provided free of charge. A good place to get to know services that may be of use to you is the [Get Started @ UOW](#) or search for "Get Started @ UOW". Services available include:

Service	Link to information about the service
Aboriginal & Torres Strait Islander	<a href="https://www.uow.edu.au/about/services/woolyungah-indigenous-centre/about-us/">https://www.uow.edu.au/about/services/woolyungah-indigenous-centre/about-us/</a>
Careers advice	<a href="https://www.uow.edu.au/student/careers/">https://www.uow.edu.au/student/careers/</a>
Counselling	<a href="https://www.uow.edu.au/student/support-services/counselling/">https://www.uow.edu.au/student/support-services/counselling/</a>
Student Accessibility and Inclusion (SAI)	<a href="https://www.uow.edu.au/student/support-services/sai/">https://www.uow.edu.au/student/support-services/sai/</a>
Information Tech.	<a href="https://www.uow.edu.au/its/index.html?ssSourceSiteId=getstarted">https://www.uow.edu.au/its/index.html?ssSourceSiteId=getstarted</a>
Study Skills	<a href="https://www.uow.edu.au/student/support-services/academic-skills/">https://www.uow.edu.au/student/support-services/academic-skills/</a>

## Student Support Coordinator (SSC)

If you have a temporary or ongoing issue or a problem that is affecting your study, including issues that are related to belonging to an equity group, then the Student Support Coordinators may be able to help. There are Student Support Coordinators available to assist students who are studying at all UOW Campuses and in all UOW Faculties. Contact details can be found on the UOW website: <https://www.uow.edu.au/student/support-services/coordinators/>

## Student Advocacy Service

The Student Advocacy Service (SAS) is free, confidential and independent service for all UOW students. The SAS provides advocacy and referral for a range of academic, procedural and administrative issues. For more information visit: <https://www.uow.edu.au/student/support-services/advocacy/>

## AskUOW

AskUOW is your primary administrative and information contact during your studies.

Our purpose is to ensure students have access to the information they need, at the time they need it. We can help with a wide range of enquiries, including key topics such as:

- Applying for [academic consideration](#)
- Fees and scholarships
- Official documentation and student letter requests
- Student forms such as course transfer and leave of absence applications
- Student ID card issuance and replacement
- Subject enrolment
- Transport concession cards and Opal cards
- Updating personal details

Get instant answers 24/7 online using [AskUOW](#). Log in with your UOW username and password.

For further support contact [askuow@uow.edu.au](mailto:askuow@uow.edu.au) or call on 1300 275 869 (1300 ASK UOW) or +61 2 4221 3927.

## Library Services

Save yourself time and enhance your studies: connect with information specialists and resources anytime, anywhere.

- For Library support connect with [Live Chat](#) or [contact the Library](#).
- For self-help see [Frequently Asked Questions](#) or browse [Library guides](#) to find information, databases and skills tutorials.
- [Research consultations](#) are available to UOW Postgraduate, Honours and Deans Scholar students.

## Academic Integrity Policy

Academic integrity involves upholding ethical standards in all aspects of academic work, including learning, teaching and research. It involves acting with the principles of honesty, fairness, trust and responsibility and requires respect for knowledge and its development. The Policy can be found at:

<https://policies.uow.edu.au/document/view-current.php?id=26>

## Code of Practice - Research

This Code mandates the current policy and best practice relating to procedures for responsible research. The Code can be found at: <https://policies.uow.edu.au/document/view-current.php?id=11>

## Honours Policy

This policy sets out the responsibilities of all parties involved in managing students undertaking Honours Programs. The Code can be found at: <https://policies.uow.edu.au/document/view-current.php?id=36>

## The Code of Practice - Work Integrated Learning (Professional Experience)

The Code of Practice - Work Integrated Learning (Professional Experience) sets out what is expected from students, the University and Host Organisations in providing work integrated learning professional experience programs. It applies to professional experience programs that form the whole or part of a subject or course offered at the University. The Code assists in promoting a productive work integrated learning experience for students and in promoting relevant UOW Work Integrated Learning Design Principles.

<https://policies.uow.edu.au/document/view-current.php?id=12>

## Copyright Policy

The purpose of this Policy is to outline responsibilities and procedures regarding the use of third party copyright material, with the objectives of reducing staff and UOW exposure to the risks associated with the use of third party copyright material, assisting staff to make full legal use of the materials at their disposal by clearly identifying responsibilities and promoting copyright compliance. The Policy can be found at:

<https://policies.uow.edu.au/document/view-current.php?id=135>

## Course Progress Policy

The Course Progress Policy establishes the requirements, definitions and procedures to be used in determining the standards of acceptable course progress. The Policy can be found at:

<https://policies.uow.edu.au/document/view-current.php?id=30>

## Examination Rules and Procedures

The UOW rules and procedures outline exam conditions, student conduct in exams, and the procedures for exam management. Further information can be found here: <https://www.uow.edu.au/student/exams/>

## **Ethical Objection by Students to the Use of Animal and Animal Products in Coursework Subjects**

This policy provides a framework for recognition of and responses to students' ethical or religious objection to animal use in coursework subjects at the University of Wollongong. For the purpose of this policy, animal use includes killing of animals in experimental work, dissection of animals that are already dead, use of animal tissues, use of animal-derived products (such as sera). These uses are relevant to teaching and assessment. Further information about this policy can be found here: <https://policies.uow.edu.au/document/view-current.php?id=154>

## **Coursework Rules**

The Coursework Rules (hereafter the Rules) govern the admission, enrolment, progression through, and qualification for a coursework award offered by the University. Further information can be found here: <https://policies.uow.edu.au/document/view-current.php?id=4>

## **Human Research Ethics**

The Human Research Ethics Committee protects the welfare and rights of the participants in research activities. Further information can be found here: <https://www.uow.edu.au/research-and-innovation/researcher-support/ethics/human-ethics/>

## **Inclusive Language Guidelines**

UOW endorses a policy of non-discriminatory language practice in all academic and administrative activities of the University. Further information is available from: <https://policies.uow.edu.au/document/view-current.php?id=239>

## **Intellectual Property Policy**

UOW's IP Intellectual Property Policy provides guidance on the approach taken to Intellectual Property (IP), including its ownership, protection and exploitation. Further information about the management of IP is available at <https://policies.uow.edu.au/document/view-current.php?id=146>

## **Review and Appeal of Academic Decisions Policy**

UOW aims to provide a transparent and consistent process for resolving a student concern about an academic decision that has affected their academic progress, including a mark or grade. Further information is available at: <https://policies.uow.edu.au/document/view-current.php?id=40>

## **Student Academic Consideration Policy**

The purpose of the Student Academic Consideration Policy is to enable student requests for academic consideration for assessable components of a subject to be evaluated in a fair, reasonable, timely and consistent manner throughout the University. **For information on the Policy, eligibility and how to apply see:** <https://www.uow.edu.au/student/admin/academic-consideration/>

## **The Student Charter - Your Rights and Responsibilities**

The Student Charter is based on principles that guide all members of the University and that promote responsible partnerships within and beyond the University community. <https://www.uow.edu.au/student/charter/>

## **Student Assignment of Intellectual Property (IP) Policy**

This policy applies to all Students (under-graduate and post-graduate) of the University of Wollongong (UOW). It may also apply to other persons by agreement. This policy sets out the approach taken by UOW in relation to

Student assignment of intellectual property. Further information about this policy can be found here: <https://policies.uow.edu.au/document/view-current.php?id=146>

### **Student Conduct Rules**

These Rules outline the required conduct of students of UOW, and direct staff and students to University Rules, standards, codes, policies, guidelines, procedures and other requirements which specify acceptable and unacceptable student conduct, and the management of alleged student misconduct. <https://policies.uow.edu.au/document/view-current.php?id=6>

### **Teaching and Assessment: Assessment and Feedback Policy**

The purpose of this Policy is to set out the University of Wollongong's approach to effective learning, teaching and assessment, including the principles and minimum standards underlying teaching and assessment practice. The Policy can be found at: <https://policies.uow.edu.au/document/view-current.php?id=38>

### **Teaching and Assessment: Code of Practice - Teaching**

This Code is a key document in implementing the University's Teaching and Assessment Policy and sets out the specific responsibilities of parties affected in relation to learning, teaching and assessment, as well as procedures for teaching staff. The Code can be found at: <https://policies.uow.edu.au/document/view-current.php?id=9>

### **Teaching and Assessment: Subject Delivery Policy**

This Policy sets out specific requirements in relation to the delivery of Subjects. The policy can be found at: <https://policies.uow.edu.au/document/view-current.php?id=39>

### **Workplace Health & Safety Policy**

The Workplace Health and Safety (WHS) unit at UOW aims to provide structures, system and support to ensure the health, safety and welfare of all at the campus. Further information is available from: <https://policies.uow.edu.au/document/view-current.php?id=177>