

CHEM1001

Foundations of Chemical and Biomolecular Sciences 1

Session 1, In person-scheduled-weekday, North Ryde 2023

School of Natural Sciences

Contents

General Information	2
Learning Outcomes	3
General Assessment Information	3
Assessment Tasks	6
Delivery and Resources	10
Unit Schedule	14
Policies and Procedures	15

Disclaimer

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

General Information

Unit convenor and teaching staff

Convenor

Ian Jamie

ian.jamie@mq.edu.au

Contact via 9850 8293

4WW 236

Drop In

Lecturer

Joanne Jamie

joanne.jamie@mq.edu.au

Contact via 9850 8283

4WW 231

Make Appointment

Credit points

10

Prerequisites

Corequisites

Co-badged status

Unit description

Foundations of Chemical and Biomolecular Sciences 1 introduces students to the principles and practical aspects of the molecular sciences, from the smallest of chemical substances through to the molecules of life - the biomolecules. This unit does not assume prior knowledge of chemistry or biology and is ideal for any student that wants to understand the atomic and molecular world within and around them. It will commence with the language of chemistry by introducing atoms and molecules and elements and compounds and using representative inorganic and organic compounds, including biomolecules, to show how their structures, functions and reactions are described. It will build on this language to allow prediction of the reactivity, behaviour and function of different classes of compounds, with a focus on acids and bases and organic compounds including biomolecules. Contemporary applications will be highlighted to show the role of chemical and biomolecular sciences in our lives, now and in the future, including in helping to achieve a sustainable environment, understanding health and disease, and advancing new molecular technologies. Practical sessions and tutorials will reinforce learning throughout this unit.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Use the language and principles of chemical science to explore the composition and properties of matter and discuss how molecular sciences are important in our lives.

ULO2: Name and write (or describe) the chemical structures for representative inorganic and organic compounds, including peptides, carbohydrates and nucleic acids.

ULO3: Analyse the chemical structure of chemical compounds to predict their function, reactivity and physical properties.

ULO4: Calculate the physical quantities that characterize chemical composition, including solids and solutions, as well as chemical reactions.

ULO5: Demonstrate laboratory skills used for the preparation, separation and analysis of chemical compounds, including an understanding of general laboratory safety procedures.

ULO6: Record and analyse scientific data, as well as communicate conclusions using the basic elements of scientific report preparation.

General Assessment Information

To pass this unit you must:

- Achieve a total mark equal to or greater than 50%, and
- Participate to an acceptable level in the hurdle activities, as decribed below.

Practicals (20%):

- You must complete four practicals, each worth 5%.
- · The practicals are composed of
 - prelab exercises (10%),
 - the "prac report" (80%),
 - and postlab exercises (10%).
- The prelabs will be done online and will be due at midnight of the Sunday before your lab class.
- The prac report will be completed during the lab class hand submitted to your demonstrator before you leave that class.

- The postlab exercises will be due at midnight of the Sunday of the week after you lab class.
- If you miss a Practical class you are NOT automatically entitled to rescheduling or a
 make-up class. Such an opportunity may be offered, if possible, provided sufficient
 warning is provided. Justification for rescheduling or make-up (Special Consideration
 requests) must be lodged via ask.mq.edu.au.

Weekly Quizzes (20%):

- Weekly Quizzes will contribute 20% to your overall mark. Your ten highest individual quiz marks will be used to calculate your average mark for the Quizzes.
- Weekly Quizzes will be completed through the Mastering Chemistry system.
- The quizzes will be released on Sunday midnight at the beginning of the week and will be due at midnight of the following Sunday, i.e., you will have a week to complete the quiz.
- Note: There will not be a quiz during the week of the Mid-Session Test.

Practical and Workshops Participatory Tasks (0%, Hurdle):

- You must attend and participate in the Practical classes to pass CHEM1001. This is a 0%-weighted, hurdle requirement. Your participation will be assessed on aspects, such as but not limited to:
 - Preparation completion of prelaboratory exercises, bringing personal protective equipment (lab coat, safety glasses, enclosing shoes, etc), bringing laboratory notes
 - Behaving safely
 - Behaving ethically
 - Engaging with the activities
- You must obtain a minimum of 80% in the assessment of your participation and behaviour (note that this "mark" is not included in your unit mark, but must be obtained to pass the hurdle requirement – failure to obtain this will result in a maximum unit mark of 49)
- You must attend and participate in the Workshop (tutorial) classes. The Workshop
 Question Set marks are not included the overall unit mark but attendance and
 participation in the workshops is a requirement of this unit, that is, it is a HURDLE task.
 Participation will be assessed by attendance at the class, engagement with the Problem
 Sets, and achieving competency in the topic. Workshop attendance will be recorded.
 Completion of the Workshop Question Set will count towards meeting the hurdle

- requirement. Engagement with the Workshop Question Set will be evidenced by completion of at least 25% of the question set during the scheduled workshop time. You must achieve 80% of the required activities to pass the hirdle threshold.
- Note: If you miss a Practical class or Workshop class you are NOT automatically entitled
 to rescheduling or a make-up class. Such an opportunity may be offered, if possible,
 provided sufficient warning is provided. Justification for rescheduling (Special
 Consideration requests) must be lodged via ask.mq.edu.au.
- If you miss a Workshop class you are NOT automatically entitled to rescheduling. Such an opportunity may be offered, if possible, provided sufficient warning is provided.
 Justification for rescheduling (Special Consideration requests) must be lodged via ask.mq.edu.au.

Mid-Session Test (20%):

- The Mid-Session Test is a hurdle assessment, and you will need to achieve at least 40% in this assessment to meet the hurdle. In the event that you make a serious attempt at the Mid-Session Test but fail to make the hurdle, you will be provided with an opportunity to re-sit the test. A serious attempt is defined as a mark of 10% below the hurdle, which in this instance is a mark between 30 and 40%. You will NOT be given a second attempt to pass the Mid-Session Test if you get obtain a mark lower than 30% for your first attempt.
- The mid-session test will be held in Week 7, as this gives time for failing students to withdraw without academic penalty.

Final Exam (40%):

The final examination will be two (2) hours, with 10 minutes reading time, consisting of
multiple choice and long answer questions. The final examination will cover all sections
of the unit (lectures, lab practicals, workshops and assignments) and is designed to
address specific understanding of all the concepts presented within the course.

Supplementary exams:

 If you receive a special consideration for the final exam, a supplementary exam will be scheduled in the interval between the regular exam period and the start of the next session. By requesting a special consideration for the final exam you are declaring yourself available for a re-sit during the supplementary examination period and will not be eligible for a second special consideration approval based on pre-existing commitments. Please ensure that you are familiar with the policy prior to submitting an application.

Gradebook:

Your marks will be displayed on iLearn through **Gradebook**. It is your responsibility to regularly verify that the records displayed at iLearn (Tools>Grades) are correct.

If you have difficulty attending and participating in a hurdle assessment task, please contact the Unit Convenor, in ADVANCE if possible, and immediately after if not, as there may be alternatives available to make-up a missed task. If there are circumstances that mean you miss a hurdle assessment task, you may apply for a special consideration. To support your extension, you must submit a "Special Consideration Request" request via www.ask.mq.edu.au. See the SPECIAL CONSIDERATIONS web page for instructions on how to do this. Please note that evidence must be given to support your request for an extension. You have a limited time after the event to submit a special consideration request (see SPECIAL CONSIDERATIONS web page).

Submission Deadlines:

Online quizzes, in-class activities, or scheduled tests and examinations must be undertaken at the time indicated in the unit guide. Should these activities be missed due to illness or misadventure, you may apply for Special Consideration.

Assessments not submitted by the due time will receive a mark of zero unless late submissions are specifically allowed as indicated in the unit guide or on iLearn.

Assessment Tasks

Name	Weighting	Hurdle	Due
Practical Class Exercises	20%	No	Week 4, 6, 8 10 OR Week 5, 7, 9, 10
Final Examination	40%	No	Final Exam Period
Weekly Quizzes	20%	No	Week 2-13 excludling Week 7
In-Session Test	20%	Yes	Week 7
SGTA Contribution	0%	Yes	Weeks 2 - 13
Practical Classes	0%	Yes	Week 4, 6, 8 ,1o OR Week 5, 7, 9, 11

Practical Class Exercises

Assessment Type 1: Lab report Indicative Time on Task 2: 12 hours

Due: Week 4, 6, 8 10 OR Week 5, 7, 9, 10

Weighting: 20%

Practical classes are designed to develop laboratory skills and scientific data analysis capabilities. The pre-practical, practical and post-practical exercises will be used to calculate the final mark for each practical class.

On successful completion you will be able to:

- Calculate the physical quantities that characterize chemical composition, including solids and solutions, as well as chemical reactions.
- Demonstrate laboratory skills used for the preparation, separation and analysis of chemical compounds, including an understanding of general laboratory safety procedures.
- Record and analyse scientific data, as well as communicate conclusions using the basic elements of scientific report preparation.

Final Examination

Assessment Type 1: Examination Indicative Time on Task 2: 20 hours

Due: Final Exam Period

Weighting: 40%

The final exam will be designed to address specific understanding of all topics presented within the course and to show that the knowledge obtained can be applied to new problems.

On successful completion you will be able to:

- Use the language and principles of chemical science to explore the composition and properties of matter and discuss how molecular sciences are important in our lives.
- Name and write (or describe) the chemical structures for representative inorganic and organic compounds, including peptides, carbohydrates and nucleic acids.
- Analyse the chemical structure of chemical compounds to predict their function, reactivity and physical properties.
- Calculate the physical quantities that characterize chemical composition, including solids and solutions, as well as chemical reactions.

Weekly Quizzes

Assessment Type 1: Quiz/Test Indicative Time on Task 2: 12 hours

Due: Week 2-13 excludling Week 7

Weighting: 20%

Weekly quizzes based on the tutorial question sets available at iLearn.

On successful completion you will be able to:

- Use the language and principles of chemical science to explore the composition and properties of matter and discuss how molecular sciences are important in our lives.
- Name and write (or describe) the chemical structures for representative inorganic and organic compounds, including peptides, carbohydrates and nucleic acids.
- Analyse the chemical structure of chemical compounds to predict their function, reactivity and physical properties.
- Calculate the physical quantities that characterize chemical composition, including solids and solutions, as well as chemical reactions.

In-Session Test

Assessment Type 1: Quiz/Test Indicative Time on Task 2: 10 hours

Due: Week 7
Weighting: 20%

This is a hurdle assessment task (see <u>assessment policy</u> for more information on hurdle assessment tasks)

There will be an in-session test that will be designed to give you specific feedback on your understanding of the topics up to this stage of the unit.

On successful completion you will be able to:

- Use the language and principles of chemical science to explore the composition and properties of matter and discuss how molecular sciences are important in our lives.
- Name and write (or describe) the chemical structures for representative inorganic and organic compounds, including peptides, carbohydrates and nucleic acids.
- Analyse the chemical structure of chemical compounds to predict their function, reactivity and physical properties.
- Calculate the physical quantities that characterize chemical composition, including solids and solutions, as well as chemical reactions.

SGTA Contribution

Assessment Type 1: Practice-based task

Indicative Time on Task 2: 0 hours

Due: Weeks 2 - 13 Weighting: 0%

This is a hurdle assessment task (see <u>assessment policy</u> for more information on hurdle assessment tasks)

You must demonstrate learning of practice based skills in SGTA classes.

On successful completion you will be able to:

- Use the language and principles of chemical science to explore the composition and properties of matter and discuss how molecular sciences are important in our lives.
- Name and write (or describe) the chemical structures for representative inorganic and organic compounds, including peptides, carbohydrates and nucleic acids.
- Analyse the chemical structure of chemical compounds to predict their function, reactivity and physical properties.
- Calculate the physical quantities that characterize chemical composition, including solids and solutions, as well as chemical reactions.

Practical Classes

Assessment Type 1: Practice-based task

Indicative Time on Task 2: 0 hours

Due: Week 4, 6, 8, 10 OR Week 5, 7, 9, 11

Weighting: **0**%

This is a hurdle assessment task (see <u>assessment policy</u> for more information on hurdle assessment tasks)

You must attend and demonstrate practice based skills in all practical classes. Rescheduling may be possible for missed classes.

On successful completion you will be able to:

- Use the language and principles of chemical science to explore the composition and properties of matter and discuss how molecular sciences are important in our lives.
- · Name and write (or describe) the chemical structures for representative inorganic and

- organic compounds, including peptides, carbohydrates and nucleic acids.
- Analyse the chemical structure of chemical compounds to predict their function, reactivity and physical properties.
- Calculate the physical quantities that characterize chemical composition, including solids and solutions, as well as chemical reactions.
- Demonstrate laboratory skills used for the preparation, separation and analysis of chemical compounds, including an understanding of general laboratory safety procedures.
- Record and analyse scientific data, as well as communicate conclusions using the basic elements of scientific report preparation.
- ¹ If you need help with your assignment, please contact:
 - the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
 - · the Writing Centre for academic skills support.
- ² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Communication

During the semester, the CHEM1001 iLearn site will be used to communicate important information to you. In addition, emails will be sent to your student email account. Please check your messages frequently.

We cannot overstate the importance of **regularly checking your emails and the CHEM1001** iLearn site

Please feel free to communicate directly with your unit convenor using the contact details provided on the iLearn. Questions about the unit content and administration that may be of general interest will be best posted the Student Q&A on the iLearn site so that everybody can see the answer.

Classes

See https://timetables.mq.edu.au/2023 for class times and locations.

Lectures: Lecture notes will be available from the iLearn site. You are expected to have
read through them before the lectures. The lectures will be used for emphasising certain
points from the notes and to provide some examples of solving questions pertaining to
the topics. It is a time for you to ask questions about the topics.

The lectures are scheduled for Tuesday 10 am – 11 am in 27 Wallys Walk (Lotus Theatre) and Thursday 12 noon – 1 pm in 27 Wallys Walk (Lotus Theatre).

Workshops (Tutorials): Workshops will be held on campus. During the Workshops, you
will work through problems (the Workshop Question Set) with your classmates in a
collaborative and interactive manner. You will be using an online system (Mastering
Chemistry), so you must bring a device that can be used to give you access to the
internet. A laptop is best. Mobile phones can be used but you may experience some
difficulty in manipulating some of the items in the questions.

The Workshop Question Set marks are not included the overall unit mark but attendance and participation in the workshops is a requirement of this unit, that is, it is a HURDLE task. Participation will be assessed by attendance at the class, engagement with the Problem Sets, and achieving competency in the topic.

• **Practicals:** In the practicals you will do actual chemistry in the laboratory. You will be able to put into practice the theory you have seen in the lectures and workshops.

The practical classes for CHEM1001 are run in 14SCO 308. It is very important that you understand that you will not be allowed to attend the laboratory if you do not have a laboratory coat ("lab coat"), safety glasses and enclosed, sturdy footwear (e.g. ugg boots are not acceptable). For hygiene reasons the Department does not provide lab coats, safety glasses or footwear. Disposable gloves are supplied. It is also important that you understand that the doors to the laboratory will be closed 15 minutes after the official start of the class. Entry to the class will not be permitted after this time.

You are required to undertake prelaboratory exercises (prelabs) before coming to the session, to help you prepare for the lab. During the lab you will be assessed on preparedness, general behaviour, ethical behaviour, and competence, as well as the quality of your results. You are to submit a report ("lab report") that summarises the outcomes of your investigation. There are post-laboratory exercises to be completed within a week of the lab session ("post-labs").

Attendance and participation in the practicals is a requirement of this unit, that is, it is a HURDLE task.

Teaching and Learning Strategy

CHEM1001 is a 10 credit-point, half-year unit and will require, on average, 10 hours study per week (contact hours plus self-study time).

CHEM1001 is designed to introduce you to the principles of the molecular sciences, including developing an understanding of the practical skills required to undertake simple chemistry experiments in an efficient and safe manner. The lecture materials, tutorials and practical classes complement each other, and along with quizzes, have been developed to increase your understanding of the topics so that you can achieve the learning outcomes.

The unit expectation is that you will:

- Attend all lectures.
- · Actively engage in the Workshop classes and attempt the exercises.
- Demonstrate competence in all practical exercises.
- Spend an average of no less than 3 hours per week of private study in addition to class contact.

If you prepare, study and attend all components of the unit and work consistently and continuously throughout the session, you will be able to develop a strong understanding of the general, inorganic and organic chemistry presented, and perform well in this unit. Students who fail to do this and try to cram just before the exam will not do well in this unit.

- Lectures: You are expected to read through and make your own notes on set of lecture notes provided on the iLearn site. At the live lectures the lecturers will spend time explaining key concepts and demonstrating how to perform important methods (calculations, interpretations, drawing representations, etc). You are expected to bring your questions to the class. There may also be non-assessed quizzes for you to use to check on your understanding of the material. Most lecture material will be available at the unit iLearn site, while other material will be provided in the lectures. Based on observations of student behaviour and performance, we emphasise that coming to lectures is essential to prevent falling behind and performing poorly. Learning is an active process, and as such, you must engage with the material. Reviewing lecture notes and relevant sections of the textbook (and beyond) before and after lectures is strongly recommended.
- Worksop (Tutorial) classes are run to assist your understanding of the course material. Experience has demonstrated that there is a strong correlation between engagement with all activities, including the Workshop classes, and success in this unit. During the Workshops we will use an online question system, Mastering Chemistry. The problems assigned for that week's workshop will be undertaken during the class. This will give you an opportunity to seek help on areas you are having difficulty with. A minimum standard must be achieved to be seen to have reached competency in the topic covered by the tutorial. If this is not achieved, further questions will be assigned using the adaptive learning system in Mastering CHemistry
- Practical classes are designed to develop basic laboratory skills, safety practices, and
 critical and analytical reasoning skills. Pre-practical ("prelabs") questions are designed to
 ensure that you are ready for the practical work and have grasped the relevant theory
 and necessary safety practices. In-lab work is designed to teach you to appropriately
 record your experimental observations and to present your calculations in a detailed

manner. Postlab exercises are designed to assess your understanding of the theory behind the experiments conducted.

Textbook:

- Chemistry: The Central Science in SI Units, Expanded Edition, Global Edition, 15th edition, by Theodore L. Brown, H. Eugene LeMay, Bruce E. Bursten, Catherine Murphy, Patrick Woodward, Steven Langford, Dalius Sagatys, Adrian George
- N.B. Mastering Chemistry is strongly aligned to this textbook. The Department has paid
 for your license for Mastering Chemistry, which includes the textbook itself. You may
 wish to purchase a hardcopy or e-text for yourself, if you find it easier to use and if you
 wish to keep the text beyond this unit. If you do so, do not buy the MasteringChemistry
 license as you already have this.

Other Recommended Texts:

- Strongly Recommended: Pushing Electrons: a Guide for Students of Organic
 Chemistry by Daniel P. Weeks, Fourth Edition, 2014, Brooks/Cole,C engage Learning.
 (https://au.cengage.com/c/isbn/9781133951889/) (QD476 .W38 2014)
- Openstax Chemistry 2e (free) Download or view at no cost at https://openstax.org/detai
 Is/books/chemistry-2e
- Introductory Chemistry by David W. Ball (free) Download or view at no cost at http
 s://open.umn.edu/opentextbooks/textbooks/22
- CLUE: Chemistry, Life, the Universe and Everything by Melanie M. Cooper and Michael W. Klymkowsky (free) Download or view at no cost at https://open.umn.edu/ opentextbooks/textbooks/clue-chemistry-life-the-universe-and-everything
- Fundamentals of Organic Chemistry by John McMurry. 7th ed., Belmont, CA:Brooks/ Cole,C 2011 (QD251.2.M4 2011)
- Introductory Chemistry by Nivaldo J. Tro, Fifth Edition (Pearson New International Edition), 2015, Pearson Education (QD33.2 .T76 2015)

Other general and organic chemistry textbooks may also be useful.

High school textbooks may be useful for those students who have not studied Chemistry prior to this unit:

- Chemistry in Focus Year 12 by Debra Smith, Anne Disney, Anna Davis (ISBN: 9780170408998)
- Excel Year 11 Chemistry Study Guide by Geoffrey Thickett (ISBN: 9781741256758)

- Excel Year 12 Chemistry Study Guide by: Geoffrey Thickett (ISBN: 9781741256765)
- Chemistry Essentials for Dummies by John T. Moore (ISBN: 9781119591146)

Covid-19

For the latest information on the University's response to COVID-19, please refer to the Coronavirus infection page on the Macquarie website: https://www.mq.edu.au/about/coronavirus-faqs. Remember to check this page regularly in case the information and requirements change during semester. If there are any changes to this unit in relation to COVID, these will be communicated via iLearn.

Unit Schedule

The following schedule is indicative only and may change.

CHEM1001 S1 2023 Schedule

Week 1

- Introductions, Administration (Practical Classes, etc), Tools (Textbook, Mastering Chemistry)
- 2. Introduction to Chemistry definitions: matter, states, reactions

Week 2

- The Periodic Table Structure of Atoms, emphasis on Electron Number, electron arrangement (shells), Trends Periods and Groups in the Periodic Table – atomic radius, ionic radius, electronegativity, ionisation energy, reactivity
- Matter and Change definitions of Chemistry, molecules/compounds, representations of Chemistry: chemical equations, balancing equations, Naming binary and simple polyatomic inorganic compounds.

Week 3

- Quantification significant figures, scientific notation. The mole and molar mass;
 conversions between amount (molecular) and amount (molar) and between amount and mass.
- 2. Quantification concentration and dilutions

Week 4

- 1. Equilibria K_{eq} . K_{sp} , K_a , K_b as examples of K_{eq} under specific contexts.
- 2. Acids and Bases examples of equilibria. K_a , K_b , K_w ; pH etc.

Week 5

- 1. Buffers concepts, quantification, Henderson-Hasselbalch Equation
- 2. Molecular Shape Lewis Diagrams
- 3. Electronegativity and polarisation

Week 6

- 1. Organic Chemistry: Functional Groups and Drawing Structures
- 2. Organic Compound Naming

Week 7

- 1. Conformations, Isomerism and Stereochemistry
- 2. Predicting Reactivity and Electron Pushing

Week 8

- 1. Alkanes, Alkenes and Alkynes Reactivities
- 2. Aromatic Compounds Properties and Reactivities

Week 9

- 1. Alkyl halides Reactivities Part 1
- 2. Alkyl halides Reactivities Part 2

Week 10

- 1. Alcohols Reactivities
- 2. Aldehydes and Ketones Reactivities

Week 11

- 1. Carboxylic Acids and Derivatives Properties and Reactivities
- 2. Biomolecules Part 1 Carbohydrates

Week 12

- 1. Biomolecules Part 2 Amines, Amino Acids, Peptides and Proteins
- 2. Biomolecules Part 3 Nucleic acids

Week 13

- 1. Revision
- 2. Revision

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to

Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- · Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e du.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than <u>eStudent</u>, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <u>eStudent</u>. For more information visit <u>ask.mq.edu.au</u> or if you are a Global MBA student contact <u>globalmba.support@mq.edu.au</u>

Academic Integrity

At Macquarie, we believe <u>academic integrity</u> – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free <u>online writing and maths support</u>, academic skills development and wellbeing consultations.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- · Upload an assignment to Studiosity
- · Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- · Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- · Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- · Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.