

MOLS8902

Molecular Sciences Research Experience

Session 1, In person-scheduled-weekday, North Ryde 2024

School of Natural Sciences

Contents

General Information	2
Learning Outcomes	2
General Assessment Information	3
Assessment Tasks	3
Delivery and Resources	5
Unit Schedule	5
Policies and Procedures	6
Changes from Previous Offering	7

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General Information

Unit convenor and teaching staff

Paul Haynes

paul.haynes@mq.edu.au

Credit points

10

Prerequisites

Admission to MBiotech and 40cp at 8000 level or above

Corequisites

Co-badged status

Unit description

This unit provides students the opportunity to undertake a research project/internship supervised by leaders in the area of molecular sciences within the context of Natural Sciences. Students will acquire research skills, including literature searching, project planning, experimental design, data analysis and scientific communication. Interested students should contact potential supervisors in their preferred research areas to discuss available projects.

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: Conduct research to solve problems in areas relevant to molecular sciences or radiopharmaceutical science.

ULO2: Use laboratory skills common in molecular sciences or radiopharmaceutical science and conduct laboratory work in a safe and responsible manner.

ULO3: Collect, record and critically interpret their research findings.

ULO4: Critically analyse and interpret published literature of relevance to their research.

ULO5: Communicate in written and oral format their research findings to scientific audiences.

General Assessment Information

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Requirements to Pass this Unit

To pass this unit you must attempt all assessments, and achieve a total mark equal to or greater than 50%.

Late Assessment Submission Penalty

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark of the task) will be applied for each day a written report or presentation assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if the assessment is submitted. The submission time for all uploaded assessments is **11:55 pm**. A 1-hour grace period will be provided to students who experience a technical concern. For any late submission please apply for Special Consideration.

Special Consideration Policy

The <u>Special Consideration Policy</u> aims to support students who have been impacted by short-term circumstances or events that are serious, unavoidable and significantly disruptive, and which may affect their performance in assessment.

Written Assessments: this is a flexibly scheduled unit so If you experience circumstances or events that affect your ability to complete the written assessments in this unit on time, please inform the convenor and see if we can negotiate a solution before submitting a Special Consideration request through ask.mq.edu.au.

Descriptions of Assessment Activities and other information

- Submission of Assessments the final report is to be submitted via Turnitin link on the iLearn site.
- Assessment Criteria examples of previous report submissions and a marking rubric for the final report are available on the iLearn site
- Final reports are marked against the rubric by two academic markers

Assessment Tasks

Name	Weighting	Hurdle	Due
Seminar	10%	No	week 13
Research Report	90%	No	5/6/24

Seminar

Assessment Type 1: Presentation Indicative Time on Task 2: 5 hours

Due: week 13 Weighting: 10%

A 10-15 min seminar presentation at a laboratory group meeting will be scheduled in the last week of semester to give the student an opportunity to present research aims and outcomes.

On successful completion you will be able to:

• Communicate in written and oral format their research findings to scientific audiences.

Research Report

Assessment Type 1: Portfolio Indicative Time on Task 2: 75 hours

Due: **5/6/24** Weighting: **90%**

Students will complete a minimum of 3 assessment tasks, with a maximum of 60% weighting for any one task. Tasks can vary and may include a major report, initial literature review, project plan, oral presentation, essay or exam, as appropriate for a 10cp unit. The major report will be examined by two examiners. The report will be formatted for submission to a scientific journal, and must conform to published guidelines, which include a strict page limit and allowance for a data appendix. Assessment tasks and weightings will follow a learning plan agreed upon with the unit convenor and supervisor, which is appropriate for a project-based unit, or will be as listed in the unit guide.

On successful completion you will be able to:

- Conduct research to solve problems in areas relevant to molecular sciences or radiopharmaceutical science.
- Use laboratory skills common in molecular sciences or radiopharmaceutical science and conduct laboratory work in a safe and responsible manner.
- Collect, record and critically interpret their research findings.
- Critically analyse and interpret published literature of relevance to their research.

• Communicate in written and oral format their research findings to scientific audiences.

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- · the Writing Centre for academic skills support.

Delivery and Resources

Students need to organise a research project ahead of time by approaching academic supervisors directly, and working out who is available to supervise a project in an area that is of interest to the student. Students should consult the School of Natural Sciences website which contains details of all the academic staff in the school including links to profiles with their areas of research interest (https://www.mq.edu.au/faculty-of-science-and-engineering/departments-and-schools/school-of-natural-sciences).

Class scheduling

There are no scheduled classes for this unit as it is based on independent study. The student and supervisor need to agree upon a schedule which meets the requirements of both.

Methods of Communication

The unit convenor will communicate mainly via Discussion Forum and Announcements on the iLearn site, and also via emails to students MQ email addresses. Personal email addresses must not be used.

COVID Information

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-fags. 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

MOLS8902 is a self-directed unit of independent study. There are no classes scheduled, and there is no set timetable.

¹ If you need help with your assignment, please contact:

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

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 eStudent, (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 eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

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.

Changes from Previous Offering

Changes to the unit from previous offering

The maximum allowable length for the final report has been reduced, to decrease student

workload. The report instructions and marking rubric have been revised and updated in response to student feedback.

We value student feedback to be able to continually improve the way we offer our units. As such we encourage students to provide constructive feedback via student surveys, to the teaching staff directly, or via the FSE Student Experience & Feedback link in the iLearn page.

Student feedback from the previous offering of this unit was very positive overall, with students satisfied with the assessment requirements and the level of support and flexibility from teaching staff.

Unit information based on version 2024.01R of the Handbook