MOLS8902

Molecular Sciences Research Experience

Session 2, Weekday attendance, North Ryde 2020

Department of Molecular Sciences

Contents

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Notice

As part of Phase 3 of our return to campus plan, most units will now run tutorials, seminars and other small group learning activities on campus for the second half-year, while keeping an online version available for those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face and online activities for your unit, please go to timetable viewer. To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

General Information

Unit convenor and teaching staff
Unit Convenor
Joanne Jamie
joanne.jamie@mq.edu.au
Contact via 98508283
4 Wally's Walk room 231
open door policy

Unit Co-convenor
Shoba Ranganathan
shoba.ranganathan@mq.edu.au
Contact via 98506262
4 Wally's Walk room 121

Credit points
10

Prerequisites
(Admission to MRadiopharmSc or MBiotech or MScience Innovation in Chemistry and Biomolecular Sciences) and (40cp at 8000 level or above) and permission by special approval

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 or radiopharmaceutical science. Students will acquire research skills, including literature searching, project planning, experimental design, data analysis and scientific communication. Interested students meeting the eligibility criteria should discuss their research interests with the unit convenor.

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

Review and Research Plan

You will develop a literature review and research/internship plan for submission to your supervisor by week 4-6 of session 2. Feedback will be given on the report by the supervisor.

Research report

The **research report** will be examined by **two examiners**. Their marks will contribute (37.5% each). The **Supervisor** should contact potential examiners for their availability and provide their contact details to the unit convenor at the beginning of Academic Week 11 of session 2.

The MOLS8902 report can be submitted either as a **dissertation** *(Option 1)* or as a **scientific manuscript** suitable for publication *(Option 2)*. Please discuss with your supervisor the most suitable format for your report.

The **Supervisor** will also provide to the unit convenor a mark /20% and accompanying report on the overall research potential of the student within MOLS8902. This will include marks toward the quality of research conducted by the student, and their ability to understand and communicate in a scientifically literate manner the research problem (incorporating a review of the relevant literature), the results and discussion of the research and coherent conclusions.

Seminar

A 20-min seminar presentation to the Department will be scheduled during the exam week of session 2, to give the student an opportunity to present research aims and outcomes.

Assessment Tasks

Name	Weighting	Hurdle	Due
Seminar	5%	No	week 14
Research report	95%	No	week 13
Review and research plan	0%	No	week 4-6

Seminar

Assessment Type [1]: Presentation
Indicative Time on Task [2]: 10 hours
Due: **week 14**
Weighting: **5%**

A 20-min seminar presentation to the Department will be scheduled during the exam week 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]: Report
Indicative Time on Task [2]: 40 hours
Due: **week 13**
Weighting: **95%**

The report will be examined by two examiners plus the supervisor. Format of the report is flexible, but will include the revised literature review suitable for a short report in thesis format.

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.

Review and research plan

Assessment Type [1]: Literature review
Indicative Time on Task [2]: 30 hours
Due: **week 4-6**
Weighting: **0%**

You will develop a literature review and research/internship plan for submission to your supervisor. Feedback will be given on the report by the supervisor.

On successful completion you will be able to:

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

[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

Delivery: This unit is equivalent to 150 hr workload.

Resources: IT facilities available in the research group, Department as well as the library will be available for literature review, word processing and data analysis. Additional facilities, such as access to specialist facilities or the use of specific instruments as required by the project will be organised by the supervisor.

Unit Schedule

This unit requires an average of 10 hours per week commitment across session 1. Laboratory work will be with supervision. Normal laboratory working hours are Mon-Fri: 9 am - 5 pm.

Lab safety induction must be undertaken **BEFORE** working in the research labs - contact your supervisor to organise this.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). 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
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy *(**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)*

Students seeking more policy resources can visit the Student Policy Gateway (https://students.mq.edu.au/support/study/student-policy-gateway). It is your one-stop-shop for the key policies you

need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/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

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- 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

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

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 Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.