MOLS3003

Molecular Sciences Project

Session 2, Weekday attendance, North Ryde 2020

Department of Molecular Sciences

Contents

Notice

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

To check the availability of face-to-face and onlin e activities for your unit, please go to timetable vi ewer. To check detailed information on unit asses sments visit your unit's iLearn space or consult yo ur unit convenor.

General Information

Unit convenor and teaching staff
Koushik Venkatesan
koushik.venkatesan@mq.edu.au

Credit points
10

Prerequisites

Corequisites
30cp from CHEM or BMOL units at 3000 level

Co-badged status

Unit description
This PACE unit is aimed at providing students with specialisations in Chemistry, Advanced Chemistry, Advanced Biomolecular Science, and Chemical and Biomolecular Sciences with work experience in the Molecular Sciences. The work experience involves participating in research with industry and/or key partners on projects in the chemistry or biomolecular science areas under the supervision of Macquarie staff and experts from industry and community-based agencies. The projects conducted in the course of completing this unit must be relevant to the Molecular Sciences and carried out with a partner approved by the Unit Convenor. The projects are devised so that individuals, or small teams of students with a blend of skills that cut across the proposed project needs, are able to undertake a research project in chemistry and/or biomolecular science areas. The projects will be done under the supervision of both Macquarie staff and experts from approved partners. The nature and composition of the projects are to be determined by the groups in concert with the external partners and advice from internal advisors; however, they are always research-based and focused on areas of relevance to the partners.

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: Design a research project in the context of a PACE activity with active engagement with a relevant partner

ULO2: Produce a professional report of the size and complexity required of workers in the field

ULO3: Create and maintain a group for the duration of the PACE activity, including delegating tasks and accepting tasks from colleagues/group members and taking some responsibility for aspects of group management

ULO4: Present information to a diverse audience in a confident and professional manner.

ULO5: Reflect on the PACE activity, including the ethical, social, personal and intellectual aspects of the activity.

ULO6: Demonstrate a sense of social, environmental and ethical awareness.

Assessment Tasks

Name	Weighting	Hurdle	Due
Reflective Praxis	10%	No	week 13
A private blog	20%	No	week 2, 4, 6, 8, 10
Project report	40%	No	week 13
Detailed project proposal	20%	No	week 2
Project Presentation	10%	No	week 12

Reflective Praxis

Assessment Type [1]: Reflective Writing
Indicative Time on Task [2]: 12 hours
Due: **week 13**
Weighting: **10%**

To synthesise all of the learning objectives and outcomes in this unit, the final assessment is a Reflective Praxis, which involves the student critically reflecting upon what they have learned in the unit, and the experience gained through their PACE activity. It is at this time that the student will also re-visit their pre- and post-unit profile surveys, all their assessments and the unit theoretical content. Further, the Unit Convenor will cross-examine this written work with the partner supervisors feedback.

On successful completion you will be able to:

- Reflect on the PACE activity, including the ethical, social, personal and intellectual

aspects of the activity.

A private blog

Assessment Type [1]: Log book
Indicative Time on Task [2]: 12 hours
Due: **week 2, 4, 6, 8, 10**
Weighting: **20%**

The first assessment is a private blog of their PACE experience which spans the semester. This private blog also provides a means of monitoring of student progress across the semester as the blog will be monitored by the teaching staff in the unit across the course of semester with feedback provided at three points during the semester.

On successful completion you will be able to:

- Design a research project in the context of a PACE activity with active engagement with a relevant partner
- Create and maintain a group for the duration of the PACE activity, including delegating tasks and accepting tasks from colleagues/group members and taking some responsibility for aspects of group management
- Reflect on the PACE activity, including the ethical, social, personal and intellectual aspects of the activity.

Project report

Assessment Type [1]: Report
Indicative Time on Task [2]: 10 hours
Due: **week 13**
Weighting: **40%**

The third assessment is a project report which encompasses the practical aspects of communicating and analyzing their project in the context of real world research encompassing the scientific disciplines of chemistry and biomolecular sciences. This will often be the first time that students have engaged in a research project where they may not necessarily know the outcomes of the work that they are performing together with the partners. They will be challenged to think in different ways as they come to grips what it means to work in these scientific disciplines.

On successful completion you will be able to:

- Produce a professional report of the size and complexity required of workers in the field
- Present information to a diverse audience in a confident and professional manner.

Detailed project proposal

Assessment Type [1]: Plan
Indicative Time on Task [2]: 8 hours
Due: **week 2**
Weighting: **20%**

The second assessment task, Detailed project proposal, is a key component of the because students of the unit are required to interact with their partners (and convenor where appropriate) to produce a project proposal. The purpose of this assessment is to require students to actively interact with the partner to agree on a project that can be executed within the context of the PACE experience.

On successful completion you will be able to:

- Design a research project in the context of a PACE activity with active engagement with a relevant partner
- Demonstrate a sense of social, environmental and ethical awareness.

Project Presentation

Assessment Type [1]: Presentation
Indicative Time on Task [2]: 12 hours
Due: **week 12**
Weighting: **10%**

The fourth assessment is an example of communicating science in action. Students use creative media (e.g. Prezi, Powerpoints with animation and voice-over, video, etc.) to showcase a Graduate Capability (in theory and practice) and the way in which this relates to their discipline. Doing so effectively within 5 minutes is an excellent test of a students ability to apply communicating science theory delivered in the unit, and it helps students grasp what the Graduate Capabilities really mean to them, personally and professionally. The presentation is a component of the wrap up/debrief at the end of semester.

On successful completion you will be able to:

- Present information to a diverse audience in a confident and professional manner.

[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

The project will be carried out in the research laboratories of the project supervisors. In the case where no space is available in research laboratories, the projects can be carried out in the teaching laboratories

The SGTA lectures will be delivered online. All the lectures will be uploaded on ECHO after the delivery of the lectures.

A number of online resources will be provided on the iLearn site to help the students carry out the task and fulfil the learning objectives of the unit.

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.