



BIOL8600

Biology Research Experience

Session 2, Weekday attendance, North Ryde 2021

Archive (Pre-2022) - Department of Biological Sciences

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Session 2 Learning and Teaching Update

The decision has been made to conduct study online for the remainder of Session 2 for all units WITHOUT mandatory on-campus learning activities. Exams for Session 2 will also be online where possible to do so.

This is due to the extension of the lockdown orders and to provide certainty around arrangements for the remainder of Session 2. We hope to return to campus beyond Session 2 as soon as it is safe and appropriate to do so.

Some classes/teaching activities cannot be moved online and must be taught on campus. You should already know if you are in one of these classes/teaching activities and your unit convenor will provide you with more information via iLearn. If you want to confirm, see the list of [units with mandatory on-campus classes/teaching activities](#).

Visit the [MQ COVID-19 information page](#) for more detail.

General Information

Unit convenor and teaching staff

Unit Convenor

Melanie Bishop

melanie.bishop@mq.edu.au

Contact via 9850 4075

14EaR 205

By appointment (please note I work part-time and will not respond to emails or calls on Fridays)

Credit points

10

Prerequisites

(20cp from (BIOL8610 or BIOL861) or BIOL873 or (BIOL8740 or BIOL874) or (BIOL8750 or BIOL875) or (BIOL8770 or BIOL877) or (BIOL8870 or BIOL887)) and permission by special approval

Corequisites

Co-badged status

Unit description

This unit enables the student to acquire biological research experience by undertaking a small independent research project under academic supervision. The research topic may be flexible, but in most cases it will be aligned with the objectives of an academic staff member involved in research. This unit can be combined with BIOL8710 Conservation in Practice for a more extended experience. Students are strongly encouraged to organise their project and supervisor well before commencing 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: Develop a testable biological hypothesis by reviewing and synthesizing previous research in the scientific literature.

ULO3: Demonstrate effective time and project management skills by working

independently to collect scientific data and by documenting these efforts using a project notebook.

ULO2: Plan and implement a research project to address this hypothesis using principles of experimental design and appropriate data collection methods for measuring and assessing biological processes.

ULO4: Communicate research findings to a scientific audience in written form by constructing a coherent, well structured document.

General Assessment Information

Note on assessment of Scientific Report: This will be a staged process with the Introduction and Methods comprising 30% of the mark, due 3/10/21. The full report, comprising Abstract, Introduction, Methods, Results, Discussion and References will comprise 30% of the mark and will be due 7/11/21. It is expected that students will use the feedback on the first stage to revise the Introduction and Methods as appropriate.

Extensions, penalties and special consideration

Late submissions of assessments will attract a penalty of 5% of the total marks allocated to the exercise per day. That is, if an assessment is out of 20, 1 mark out of 20 will be deducted for every day late. You may hand in your work after the due date and escape penalty only if you have an acceptable reason (usually a medical certificate) and received special consideration. Discuss your problem with the Unit Convenor as early as possible before the due date.

Information on applying for Special Consideration for disruption to studies can be found here: <https://students.mq.edu.au/study/my-study-program/special-consideration>

Assignment submission, grading and return

All assignments will be submitted and graded online and must be uploaded via Turnitin.

Turnitin is a powerful online tool for the detection of plagiarism. It works by comparing the text of a submitted document (i.e., your assignment) with the work of your current classmates, other courses at Macquarie, as well as published material in books, journals and on the web.

To submit your assignment via turnitin:

1. Visit the Assessments tab in iLearn, look for the turnitin header and select the relevant assessment item
2. Click on the Submit Paper tab.
3. Select your Student Name
4. Enter a Submission Title.
5. Click Browse and select the file you would like to submit.
6. Click Add Submission.

Grading

All assessments for this unit will be marked according to the rubrics provided in the Assessments folder of ilearn. This unit and its assessments are moderated according to departmental and university requirements. For example, where assessments are marked by multiple people, all agree on the marking process and marks are compared to ensure consistency. All summative assessments are moderated, with the major assessment also moderated by an academic external to the unit.

Plagiarism

All written work must be in the student's own words. Assessments submitted via Turnitin will be subjected to plagiarism detection. Plagiarism will not be tolerated, and will be reported to the Faculty Disciplinary Committee.

Assessment Tasks

Name	Weighting	Hurdle	Due
Project proposal	20%	No	15/08/2021
Introduction and Methods	30%	No	03/10/2021
Scientific Report	30%	No	07/11/2021
Supervisor Report	20%	No	5/11/2021

Project proposal

Assessment Type ¹: Design Task

Indicative Time on Task ²: 10 hours

Due: **15/08/2021**

Weighting: **20%**

Write a short proposal explaining the work that you will undertake

On successful completion you will be able to:

- Develop a testable biological hypothesis by reviewing and synthesizing previous research in the scientific literature.
- Demonstrate effective time and project management skills by working independently to collect scientific data and by documenting these efforts using a project notebook.
- Plan and implement a research project to address this hypothesis using principles of experimental design and appropriate data collection methods for measuring and assessing biological processes.

Introduction and Methods

Assessment Type ¹: Report

Indicative Time on Task ²: 10 hours

Due: **03/10/2021**

Weighting: **30%**

Write the Introduction to the final report describing what is currently known in the area of your project and how your work will contribute to further understanding in this area, and outline the Methods used (this forms part of the major report)

On successful completion you will be able to:

- Develop a testable biological hypothesis by reviewing and synthesizing previous research in the scientific literature.
- Demonstrate effective time and project management skills by working independently to collect scientific data and by documenting these efforts using a project notebook.
- Plan and implement a research project to address this hypothesis using principles of experimental design and appropriate data collection methods for measuring and assessing biological processes.
- Communicate research findings to a scientific audience in written form by constructing a coherent, well structured document.

Scientific Report

Assessment Type ¹: Report

Indicative Time on Task ²: 20 hours

Due: **07/11/2021**

Weighting: **30%**

Complete the Full Scientific Report in the form of a Scientific Paper

On successful completion you will be able to:

- Develop a testable biological hypothesis by reviewing and synthesizing previous research in the scientific literature.
- Demonstrate effective time and project management skills by working independently to collect scientific data and by documenting these efforts using a project notebook.
- Plan and implement a research project to address this hypothesis using principles of experimental design and appropriate data collection methods for measuring and assessing biological processes.
- Communicate research findings to a scientific audience in written form by constructing a coherent, well structured document.

Supervisor Report

Assessment Type ¹: Performance

Indicative Time on Task ²: 0 hours

Due: **5/11/2021**

Weighting: **20%**

Supervisors will provide a report on student performance, progress, abilities acquired and attendance throughout placement.

On successful completion you will be able to:

- Communicate research findings to a scientific audience in written form by constructing a coherent, well structured document.

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

As this unit is a research placement there will be no regular classes. However a welcome and information session will be conducted online by the convenors early in Semester 2 at a time and day to be advised via ilearn. A recording of this session will be made available.

Students can work on a project with a university academic or PhD student or externally. However, it is the student's responsibility to find a project. Some potential projects will be advertised on ilearn. Projects need to be discrete pieces of research which can be written up as a paper.

Students are strongly advised to set up a regular meeting time with their supervisor, at least fortnightly. Students are also required to develop a time line of activities as part of the Proposal Assessment to ensure timely completion of the unit.

The research component is expected to take at least 120 hours, not including the written assessments.

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](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](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies](https://students.mq.edu.au/support/study/policies) (<https://students.mq.edu.au/support/study/policies>). 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.edu.au) (<https://policies.mq.edu.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

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.