



BIOL8600

Biology Research Experience

Session 1, Special circumstances 2021

Archive (Pre-2022) - Department of Biological Sciences

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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.

Notice

As part of [Phase 3 of our return to campus plan](#), most units will now run tutorials, seminars and other small group activities on campus, and most will keep an online version available to those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face 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

Glenn Brock

glenn.brock@mq.edu.au

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.

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.

ULO3: Demonstrate effective time and project management skills by working independently to collect scientific data and by documenting these efforts using a project

notebook.

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

General Assessment Information

All assessable items must be handed in on time. A 10% deduction per 24 hrs will commence immediately after the submission time. For example, 10% of the total score will be deducted for any assignment handed within the first 24 hrs after the submission time. 20% deduction for an assignment which is between 24 and 48 hrs late etc.

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. Penalties for plagiarism range from loss of marks to awarding of a zero, depending upon the level of plagiarism, and reporting to the Faculty Disciplinary Committee. Also, if late submissions are accepted, please specify the policy for them.

Assessment Tasks

| Name | Weighting | Hurdle | Due |
|---|-----------|--------|---------|
| <u>Scientific Report</u> | 30% | No | week 11 |
| <u>Introduction and Methods</u> | 30% | No | week 8 |
| <u>Project proposal</u> | 20% | No | week 3 |
| <u>Supervisor Report</u> | 20% | No | week 13 |

Scientific Report

Assessment Type ¹: Report

Indicative Time on Task ²: 20 hours

Due: **week 11**

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.
- 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.
- Demonstrate effective time and project management skills by working independently to

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

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

Introduction and Methods

Assessment Type ¹: Report

Indicative Time on Task ²: 10 hours

Due: **week 8**

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.
- 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.
- Demonstrate effective time and project management skills by working independently to collect scientific data and by documenting these efforts using a project notebook.
- Communicate research findings to a scientific audience in written form by constructing a coherent, well structured document.

Project proposal

Assessment Type ¹: Design Task

Indicative Time on Task ²: 10 hours

Due: **week 3**

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.
- 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.
- Demonstrate effective time and project management skills by working independently to

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

Supervisor Report

Assessment Type ¹: Performance

Indicative Time on Task ²: 0 hours

Due: **week 13**

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

There are no lectures or tutorials for this unit. 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.

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central\)](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) (<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](http://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<http://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 Enquiry Service

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

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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](#).

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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.

Changes since First Published

| Date | Description |
|------------|-------------|
| 04/02/2021 | SC linkage |