BIOL760

Biology in the 21st Century

S2 Day 2018

Dept of Biological Sciences

Contents

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General Information

Unit convenor and teaching staff
Caitlin Kordis
caitlin.kordis@mq.edu.au

Credit points
4

Prerequisites
Admission to MRes

Corequisites

Co-badged status

Unit description
This unit is designed to provide students with hands-on experience in biological research, particularly in the area relative to your second year project. The unit also aims for you to develop your skills with working with potential supervisors and research groups. Students will undertake the equivalent of 150 hours work experience in a research group in the Department of Biological Sciences. Students will learn methods used by the research group, assist in research relative to their project, attend research group meetings, and, potentially, pursue their own small individual project.

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:

Understand your roles relative to WHS and apply this to complete WHS requirements

Interact with research group members and develop peer networking skills

Communicate methodologies in written form

Evaluate methods sections in primary scientific literature

Develop practical skills in laboratory and/or field methods

Assessment Tasks

Name	Weighting	Hurdle	Due
WHS Training modules	0%	Yes	4/9/18
WHS portfolio	10%	No	4/9/18
Research proposal	20%	No	9/10/18
Research methods	20%	No	6/11/18
Supervisor report	50%	No	N/A

WHS Training modules

Due: **4/9/18**

Weighting: **0%**

This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

ALL students (independent of research) will complete online WHS modules: Lab essentials, Biosafety and use of hazardous chemicals.

On successful completion you will be able to:

- Understand your roles relative to WHS and apply this to complete WHS requirements
- Interact with research group members and develop peer networking skills
- Evaluate methods sections in primary scientific literature

WHS portfolio

Due: **4/9/18**

Weighting: **10%**

A portfolio outlining completion of WHS modules, the WHS training plan from Lab Essentials and a project specific WHS needs will be prepared.

On successful completion you will be able to:

- Understand your roles relative to WHS and apply this to complete WHS requirements

Research proposal

Due: **9/10/18**

Weighting: **20%**

Students will prepare a research proposal (using a provided template) outlining

background, aims and brief methods for year 2 project

On successful completion you will be able to:

- Interact with research group members and develop peer networking skills
- Communicate methodologies in written form
- Evaluate methods sections in primary scientific literature

Research methods

Due: **6/11/18**
Weighting: **20%**

Students will write up the methods they have learnt in their placement in written form for publication

On successful completion you will be able to:

- Understand your roles relative to WHS and apply this to complete WHS requirements
- Interact with research group members and develop peer networking skills
- Communicate methodologies in written form
- Evaluate methods sections in primary scientific literature
- Develop practical skills in laboratory and/or field methods

Supervisor report

Due: **N/A**
Weighting: **50%**

Supervisors will provide a report on student performance, progress, participation in group activities, abilities acquired, competency with performing methods, and attendance throughout the placement.

On successful completion you will be able to:

- Interact with research group members and develop peer networking skills
- Develop practical skills in laboratory and/or field methods

Delivery and Resources

Please see iLearn for assessment and class details.

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.)*

Undergraduate 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 shown in *iLearn*, 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.

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 improve your marks and take control of your study.

- Workshops

- StudyWise

- Academic Integrity Module for Students

- Ask a Learning Adviser

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

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.

Graduate Capabilities

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcome

- Develop practical skills in laboratory and/or field methods

Assessment tasks

- WHS Training modules
- WHS portfolio
- Supervisor report

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

- Understand your roles relative to WHS and apply this to complete WHS requirements
- Communicate methodologies in written form
- Evaluate methods sections in primary scientific literature
- Develop practical skills in laboratory and/or field methods

Assessment tasks

- WHS Training modules
- WHS portfolio
- Research methods
- Supervisor report

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

- Communicate methodologies in written form
- Evaluate methods sections in primary scientific literature

Assessment tasks

- WHS Training modules
- Research proposal
- Supervisor report

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

Learning outcomes

- Understand your roles relative to WHS and apply this to complete WHS requirements
- Interact with research group members and develop peer networking skills
- Communicate methodologies in written form
- Develop practical skills in laboratory and/or field methods

Assessment tasks

- WHS Training modules
- WHS portfolio

- Research methods
- Supervisor report

PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

Learning outcomes

- Understand your roles relative to WHS and apply this to complete WHS requirements
- Interact with research group members and develop peer networking skills
- Communicate methodologies in written form
- Evaluate methods sections in primary scientific literature
- Develop practical skills in laboratory and/or field methods

Assessment tasks

- Research proposal
- Research methods
- Supervisor report