BIOL7935

Advanced Research Topics in Biology

Session 2, Weekday attendance, North Ryde 2020

Department of Biological Sciences

Contents

Disclaimer

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
Matthew Kosnik
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Credit points
10

Prerequisites
Admission to MRes

Corequisites

Co-badged status

Unit description
The aim of this unit is to search, read and critically review the available scientific literature across a broad range of fields within biological sciences at an advanced level. The topics are to be decided by the student in consultation with a mentor from the Department of Biological Sciences. All students undertake independent literature research, with regular contact with their topic mentor either in person or via e-mail. Students will need to take responsibility for organising their workload throughout the semester. This unit encourages students to directly interact with research active academic staff, postdoctoral researchers and PhD students within the department and to explore the most current and controversial issues in biological sciences.

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: Evaluate and synthesise the current state of knowledge in a topic at the forefront of biological research.

ULO2: Identify a knowledge gap in the field, explain its importance and present a case for addressing it.

ULO3: Demonstrate mastery of bibliographic database software.

> **ULO4:** Critically review the written work of others to a professional standard

General Assessment Information

The assessment for this unit is intended to be fully authentic and small adjustments can be made to ensure that the assessments are appropriate for the student's topic. Any adjustment needs to increase the authenticity of the assessment and/or make the assessment more applicable to the students area of research interest.

Assessment Tasks

Name	Weighting	Hurdle	Due
Annotated bibliography	10%	No	Week 2 or as agreed
Literature review outline	10%	No	Week 4 or as agreed
Peer review of professional work	20%	No	Week 6 or as agreed
Literature review	40%	No	Week 10 & 12 or as agreed
Peer review of literature review	20%	No	Week 11 or as agreed

Annotated bibliography

Assessment Type [1]: Annotated bibliography
Indicative Time on Task [2]: 20 hours
Due: **Week 2 or as agreed**
Weighting: **10%**

Students will provide an annotated bibliography. The bibliography should be prepared using a referencing database program such as Mendeley or Endnote. For each paper you should include a short description of the relevance of the paper to your review. The bibliography must be submitted as a database file containing your annotated references.

On successful completion you will be able to:

• Demonstrate mastery of bibliographic database software.

Literature review outline

Assessment Type [1]: Professional writing
Indicative Time on Task [2]: 20 hours
Due: **Week 4 or as agreed**
Weighting: **10%**

Students will meet and discuss with their supervisor a structure and outline for their literature review. Students will provide an outline of their lit review, presented as a brief, annotated table of contents that lists the major sections for their review and the information to be covered.

On successful completion you will be able to:

- Identify a knowledge gap in the field, explain its importance and present a case for addressing it.

Peer review of professional work

Assessment Type [1]: Professional writing
Indicative Time on Task [2]: 20 hours
Due: **Week 6 or as agreed**
Weighting: **20%**

Students will be provided with a relevant piece of scientific writing and they are to provide detailed written feedback and comments on the work. A relevant piece of scientific writing will be provided and approved by the student's supervisor and the unit convenor. It should be a final draft / submission ready - grant, paper, PhD thesis chapter, or MRes thesis relevant to the student's area of research interest. The authors, supervisor, and/or convenor should provide the student with the evaluation criteria and any special focus area prior review.

On successful completion you will be able to:

- Critically review the written work of others to a professional standard

Literature review

Assessment Type [1]: Literature review
Indicative Time on Task [2]: 60 hours
Due: **Week 10 & 12 or as agreed**
Weighting: **40%**

Students are to complete a literature review based on the broad topic that they expect to research in year 2 of the MRes. The review topic will identify knowledge gaps that could be addressed in the context of MRes or PhD research. Students are to engage with their supervisor through regular meetings and explore the structure and content of the review.

On successful completion you will be able to:

- Evaluate and synthesise the current state of knowledge in a topic at the forefront of biological research.
- Identify a knowledge gap in the field, explain its importance and present a case for addressing it.
- Demonstrate mastery of bibliographic database software.

Peer review of literature review

Assessment Type [1]: Professional writing
Indicative Time on Task [2]: 20 hours
Due: **Week 11 or as agreed**
Weighting: **20%**

Students are to provide detailed written feedback and comments on the draft literature reviews of their peers.

On successful completion you will be able to:

- Critically review the written work of others to a professional standard

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[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 is a mandatory meeting in Week 1 for both students and supervisors - attendance can be online if necessary.

Meetings with supervisors is to be arranged by the students & supervisors.

The unit convenor will have a weekly meeting as necessary and will arrange workshops at the request of students, but this unit is student led!

Unit Schedule

This unit is primarily self directed and it involves working closely with your subject matter

supervisor. The unit convenor will help keep everyone on track. We (students and supervisors) will have a meeting on the first week of classes to make sure everyone understands the expectations of the unit, and then we (students and convenor) will have short weekly Zoom meetings (to be scheduled during the first week of classes). Students and supervisors will need to establish their own meeting schedule.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.m q.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-centr al). 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.m q.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 s://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/p olicy-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://stu dents.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.