BIOL799

Advanced Research Topics in Biology

S2 Day 2014

Dept of Biological Sciences

Contents

General Information

Unit convenor and teaching staff
Unit Convenor
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Credit points
4

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:

Through the preparation of a critical review of the literature and research proposal, students will further develop their skills in scientific writing.

Students will build on their existing skills in the use of online databases and the use of bibliographical software in the preparation of their literature review.

Students will develop a working relationship with a research supervisor and learn the

expectations of such relationships, and the conduct of productive meetings.

Students will develop their skills in the review of their own written work and that of peers.

Students develop skills in preparing for, engaging in and recording outcomes from research meetings with their supervisors.

Assessment Tasks

Name	Weighting	Due
Lit review outline	15%	22/8/14
Peer review	10%	3/10/14, 10/10/14
Literature Review	45%	24/10/14
Research proposal	25%	7/11/14
Meeting notes	5%	7/11/14

Lit review outline

Due: **22/8/14**
Weighting: **15%**

Students will meet and discuss with their supervisor a structure and outline for their literature review. Students will provide a 1 page outline of their lit review, presented as a brief, annotated table of contents that lists the major sections for their review and the information covered. Students will provide a bibliography including at least 30 relevant papers. The database should be presented in electronic format with a short description of the main points and relevance of the paper

On successful completion you will be able to:

- Through the preparation of a critical review of the literature and research proposal, students will further develop their skills in scientific writing.
- Students will build on their existing skills in the use of online databases and the use of bibliographical software in the preparation of their literature review.

Peer review

Due: **3/10/14, 10/10/14**
Weighting: **10%**

Copies of student draft literature reviews will be disseminated among the class. Students are to provide detailed written feedback and comments on the work of their peers.

Completed raft literature reviews are due 4 of October

Comments on peer reviews are due 11 October.

On successful completion you will be able to:

- Students will develop their skills in the review of their own written work and that of peers.

Literature Review

Due: **24/10/14**
Weighting: **45%**

Students are to complete a 2500 word literature review based on the topic that they expect to research in year 2 of the MRes. 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:

- Through the preparation of a critical review of the literature and research proposal, students will further develop their skills in scientific writing.

Research proposal

Due: **7/11/14**
Weighting: **25%**

Students will prepare a research proposal using the template provided. The proposal will outline the aims and basic methods of their research project for year 2 of the MRes. Students will consult with their supervisors in the preparation of the proposal.

On successful completion you will be able to:

- Through the preparation of a critical review of the literature and research proposal, students will further develop their skills in scientific writing.

Meeting notes

Due: **7/11/14**
Weighting: **5%**

Students will complete a short template to summarise and reflect on the meetings that they have with their supervisor. Students should meet at least four times with their supervisor and list the outcomes, action items, and reflect on the usefulness of the meeting.

On successful completion you will be able to:

- Students will develop a working relationship with a research supervisor and learn the

expectations of such relationships, and the conduct of productive meetings.

- Students develop skills in preparing for, engaging in and recording outcomes from research meetings with their supervisors.

Delivery and Resources

Delivery of content will be via iLearn and scheduled meetings.

Students are to engage with their supervisors for assistance with preparing the literature review and research proposal.

Unit Schedule

Timetable

There are no centrally timetabled classes for this subject. Students are required to attend sessions throughout the semester.

Details of class times and topics will be posted on iLearn.

An introductory session will be held Friday 8 August 1230-200.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/p

olicy.html *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the Learning and Teaching Category of 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/support/student_conduct/

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://informatics.mq.edu.au/help/.

When using the University's IT, you must adhere to the Acceptable Use Policy. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

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:

Assessment tasks

- Lit review outline
- Literature Review

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:

Assessment tasks

- Lit review outline
- Literature Review

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:

Assessment tasks

- Lit review outline
- Peer review
- Literature Review
- Meeting notes

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:

Assessment tasks

- Research proposal
- Meeting notes