



BIOL700

Research Frontiers in Biology

S1 Day 2019

Dept of Biological Sciences

Contents

| | |
|---|----|
| <u>General Information</u> | 2 |
| <u>Learning Outcomes</u> | 2 |
| <u>Assessment Tasks</u> | 3 |
| <u>Delivery and Resources</u> | 6 |
| <u>Unit Schedule</u> | 7 |
| <u>Policies and Procedures</u> | 7 |
| <u>Graduate Capabilities</u> | 9 |
| <u>Changes from Previous Offering</u> | 12 |
| <u>Assessment Weighting</u> | 12 |
| <u>Assessments</u> | 12 |

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.

General Information

Unit convenor and teaching staff

Unit Convenor

Katherine McClellan

katherine.mcclellan@mq.edu.au

Contact via katherine.mcclellan@mq.edu.au

E8B224

by appointment

Kate Barry

kate.barry@mq.edu.au

Credit points

4

Prerequisites

Admission to MRes

Corequisites

Co-badged status

Unit description

This unit is designed to expose MRes students to the broad range of topics that are currently dominating biological sciences. This unit is a seminar and conference unit that will allow students to engage deeply with current research topics, encourages them to reflect on current research trends, and develop their science communication skills.

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:

Critically reflect on your current knowledge, create and implement a plan to learn enough about a topic to discuss it effectively with peers and professionals in relation to their research

Synthesise and professionally communicate advanced concepts in the biological sciences to students, peers and researchers via blogs, tweets and podcasts

Apply networking skills in different contexts (e.g. Twitter, discussion forums and interviews) with peers and partners, from industry and research

Critically reflect upon your own written work and constructively review the work of your peers

Assessment Tasks

| Name | Weighting | Hurdle | Due |
|---------------------------------------|-----------|--------|------------------|
| <u>Participation</u> | 10% | No | Weekly |
| <u>Blogging and Tweeting</u> | 45% | No | Fortnightly |
| <u>Peer Assessment</u> | 20% | No | 10/3/19 & 1/5/19 |
| <u>Podcast</u> | 20% | No | 3/6/2018 |
| <u>MRes Conference Summary Report</u> | 5% | No | 25/3/19 |

Participation

Due: **Weekly**

Weighting: **10%**

Seminars

Attend 10 or more lunch time seminars in the Departmental of Biological Sciences (1-2pm Wednesdays, Weeks 1-12).

Attend 3 seminars elsewhere (e.g. other departments at Macquarie University, other universities, museums, botanical gardens or other research oriented institutions).

Attend the MRes conferences (Thursday 21 March, 9-5pm).

Discussions

Attend 10 or more, and participate in 5 or more discussions following lunch time seminars in the Departmental of Biological Sciences (2-3pm Wednesdays, Weeks 1-12).

On successful completion you will be able to:

- Critically reflect on your current knowledge, create and implement a plan to learn enough about a topic to discuss it effectively with peers and professionals in relation to their research
- Synthesise and professionally communicate advanced concepts in the biological sciences to students, peers and researchers via blogs, tweets and podcasts
- Apply networking skills in different contexts (e.g. Twitter, discussion forums and

interviews) with peers and partners, from industry and research

Blogging and Tweeting

Due: **Fortnightly**

Weighting: **45%**

You will write and post four short (500-800 word) blogs using WordPress, and four tweets using Twitter, based on seminars presented during the lunch time seminar series in the Department of Biological Sciences. You will also submit a text version both your blog and the accompanying Tweet to the Turnitin submission link in iLearn. We will cover blogging and Tweeting skills and technology in Week one.

Your blogs must (1) Accurately and succinctly summarise the seminar topic (information from the seminar, discussion and reading); (2) Demonstrate your breadth of knowledge on the topic (reference information that has not come directly from the seminar or discussion - i.e. further reading of primary literature); (3) Critique the work (did the speaker provide a valid conclusion for the hypothesis tested and results presented?) and provide your opinion, which requires you to...; (4) Put the topic into a broader context (i.e. highlight why the reader should care and demonstrate that you have understood the significance of the topic); (5) Create an accurate, easily digestible blog post that faithfully articulates the salient points of the topic in an entertaining way (i.e. the challenge will be to provide a blog that a first year university student would be able to understand); (6) and be accompanied by a clear, succinct (280 characters max), insightful and thought provoking Tweet.

Due Dates

- Blog & Tweet 1 (peer marked - more info in Peer Review doc.) written on Week 1 seminar, due 11:59pm Sunday 3 March (Week 2)
- Blog & Tweet 2 (convenor marked) written on Week 2 or 3 seminars, due 11:59pm Wednesday 20 March (Week 4)
- Blog & Tweet 3 (peer marked) written on Week 4 or 5 seminars, due 11:59pm Wednesday 3 April (Week 6)
- Blog & Tweet 4 (convenor marked) written on Week 6, 7, 8 or 9 seminars, due 11:59pm Wednesday 15 May (Week 10)

On successful completion you will be able to:

- Synthesise and professionally communicate advanced concepts in the biological sciences to students, peers and researchers via blogs, tweets and podcasts
- Apply networking skills in different contexts (e.g. Twitter, discussion forums and interviews) with peers and partners, from industry and research

Peer Assessment

Due: **10/3/19 & 1/5/19**

Weighting: **20%**

Using the Peer Review Workshop, you will critically assess 10 blogs and Tweets in two batches of five (i.e. 5x blogs and Tweet 1, and 5x blog and Tweet 3) which have been written by your peers. The convenor will randomly allocate which blogs you will mark. All blogs will be based on the seminars attended within the Department of Biological Sciences. In Week 2 you will peer review the Blog & Tweet 1 submissions, and give a mock-mark (i.e. the mark you allocate will not affect the recipient's grade, but you will be assessed on both your summative and formative feedback). This will help you to critically reflect on your own writing, identify effective blogging styles and become familiar with the marking rubric.

Due Dates for completing Peer Reviews

- Blog & Tweet 1 – Sunday 10 March, 11:59pm (Week 3)
- Blog & Tweet 3 – Wednesday 1 May, 11:59pm (Week 8)

On successful completion you will be able to:

- Critically reflect upon your own written work and constructively review the work of your peers

Podcast

Due: **3/6/2018**

Weighting: **20%**

You need to identify a biology topic that interests you and go explore it (i.e. attend seminars, read papers, speak to people who are experts in that area), then form an interesting story around this topic and create a 6 minute podcast on it. You will need to have (1) an introduction that sets the scene of the topic (why is this topic important and does it how it fit into the bigger picture?), (2) a middle section that logically progresses through a discussion of the topic, then (3) finally a concluding statement that ties up the discussion and brings the listener back round to the context of the bigger picture. Email your podcast directly to the unit convenor, and submit a full transcript transcript of the podcast to the Turnitin submission link in iLearn.

Due date:

Monday 3 June 2019, 10am

On successful completion you will be able to:

- Critically reflect on your current knowledge, create and implement a plan to learn enough about a topic to discuss it effectively with peers and professionals in relation to their research

- Synthesise and professionally communicate advanced concepts in the biological sciences to students, peers and researchers via blogs, tweets and podcasts
- Apply networking skills in different contexts (e.g. Twitter, discussion forums and interviews) with peers and partners, from industry and research

MRes Conference Summary Report

Due: **25/3/19**

Weighting: **5%**

You will attend the MRes Year 2 Conference on March 21 (9am-5pm in the Biology Tea Room). You will select your three favourite presentations and provide short summaries and networking information on them. The question prompts are provided for you on iLearn.

Due Date:

Sunday 24 March 2019, 11:59pm

On successful completion you will be able to:

- Apply networking skills in different contexts (e.g. Twitter, discussion forums and interviews) with peers and partners, from industry and research

Delivery and Resources

Website

iLearn and email will be the principle method of communication in this unit. Notification of the seminar speaker, their topic and a link to a key paper for each seminar will be provided via iLearn. Assessment guidelines, marking rubrics, tutorial slides and other unit information will be made available on iLearn.

You are expected to check iLearn several times a week to:

- Checking subject announcements
- Looking up details of speakers
- Finding information about assessments
- Submitting assignments

How do you log in? The URL for the iLearn is: <https://ilearn.mq.edu.au/>. You will need to log in to iLearn each time you use it. Your user name is your student number and the password your oneID. For further details about iLearn go to http://mq.edu.au/iLearn/student_info/index.htm. If you are having trouble accessing your online unit due to a disability or health condition, please go to the Student Services Website at <https://www.mq.edu.au/study/starting-at-macquarie/student-support> for information on how to get assistance. If you cannot log in after ensuring you have entered your username and password correctly, you should contact Student IT Help, Phone: (02) 9850 4357 (in Sydney) or 1 800 063 191 (outside Sydney).

Technology required

You will need an electronic device capable of connecting to the internet (e.g. laptop, or tablet), a stable internet connection, access to iLearn, [Wordpress](#) (online blogging), Twitter, [Audacity](#) (free audio editing software), a word processing software (e.g. MS Word), a pdf reader (e.e. Adobe Acrobat Reader), and journal articles through the [library](#) website and the professional websites of speakers.

Late assignments

Assignments must be submitted by the due date. Late assignments will not be marked, unless you have a prearranged an extension for a serious and unavoidable disruption to your studies.

Unit completion requirements

To complete this unit and gain a 'P' grade or better requires an overall pass of 50% and a high level of attendance and participation in both seminars and discussion groups.

Unit Schedule

Tutorials

Mondays 10am-12pm, in Week 1-4, in 17 Wallys Walk (C5C) 236 Tutorial Rm

Seminars

Wednesdays 1-2pm, in Weeks 1-12, in the Biology Tea Room [14 Eastern Road (E8A) Room 280]

Discussions

Wednesdays 2-3pm, in Weeks 1-12, in the Biology Tea Room [14 Eastern Road (E8A) Room 280]

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.*)

Undergraduate 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 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

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.

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 outcomes

- Critically reflect on your current knowledge, create and implement a plan to learn enough about a topic to discuss it effectively with peers and professionals in relation to their research
- Apply networking skills in different contexts (e.g. Twitter, discussion forums and interviews) with peers and partners, from industry and research
- Critically reflect upon your own written work and constructively review the work of your peers

Assessment tasks

- Participation
- Blogging and Tweeting
- Peer Assessment
- Podcast
- MRes Conference Summary 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

- Critically reflect on your current knowledge, create and implement a plan to learn enough about a topic to discuss it effectively with peers and professionals in relation to their research
- Synthesise and professionally communicate advanced concepts in the biological sciences to students, peers and researchers via blogs, tweets and podcasts

Assessment tasks

- Participation
- Blogging and Tweeting
- Podcast

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 outcome

- Critically reflect upon your own written work and constructively review the work of your peers

Assessment task

- Peer Assessment

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 outcome

- Critically reflect on your current knowledge, create and implement a plan to learn enough about a topic to discuss it effectively with peers and professionals in relation to their research

Assessment tasks

- Participation
- Podcast

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

- Synthesise and professionally communicate advanced concepts in the biological sciences to students, peers and researchers via blogs, tweets and podcasts
- Critically reflect upon your own written work and constructively review the work of your peers

Assessment tasks

- Participation
- Blogging and Tweeting
- Peer Assessment
- Podcast

PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

Learning outcome

- Critically reflect upon your own written work and constructively review the work of your peers

Assessment task

- Peer Assessment

Changes from Previous Offering

After reviewing the Biology MRes program it was determined that the workload of BIOL700 was higher than other Research Frontiers units and there was an assessment similar to the Working Group Proposal in BIOL711. For 2019 the Working Group Proposal has been dropped along with one blog, making a total of 4 blogs to be submitted.

The HDR conference attendance requirement has also been dropped.

The Learning outcomes have been rephrased to reflect these changes.

Assessment Weighting

The weighting for assessments has been changed to accommodate the removal of the 30% assessment WGP.

Assessments

The 30% assessment Working Group Proposal (WGP) has been removed as there is a similar assessment in BIOL711.

The number of blogs to be submitted has been reduced from 5 to 4.

The number of blogs to be Peer Reviewed has been reduced from 15 to 10.

A minor assessment has been added "MRes Conference Summary Reports - 3 talks" at 5%.

Due dates and workload have been adjusted to be "front heavy" with the majority of assessments due week 8 or earlier (only Blog and Tweet 4, and the Podcast [submittable at any time] are due after week 8) so that students are able to better balance the workload of other units which tend to have big deadlines in the second half of the teaching session.