

# BIOL700

# **Research Frontiers in Biology**

S1 Day 2018

Dept of Biological Sciences

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#### Disclaimer

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### **General Information**

Unit convenor and teaching staff

Unit Convenor

Katherine McClellan

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E8B224

by appointment

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 and encourages them to reflect on current research trends.

### 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:

Learn how science is communicated

Gain skills in efficiently understanding a new topic

Understand process behind enquiry

Constructively discuss and critique scientific media

Attain an understanding on how to network effectively

Develop a process to generate new ideas

#### **Assessment Tasks**

Name	Weighting	Hurdle	Due
Participation	10%	No	Weekly
Blogging and Tweeting	35%	No	Fortnightly
Peer Assessment	10%	No	TBA
Podcast	15%	No	3/6/2018
Working group	30%	No	12/6/2018

## Participation

Due: **Weekly** Weighting: **10%** 

#### **Tutorials**

Tutorials will be held on Wednesday mornings in Weeks 1-6. These will cover information on assessments and how to complete them (blogging, tweeting, podcastsing and peer review), asking questions in discussions, individual discussions about proposals, and opportunities to discover the breath of research carried out in the Department by meeting academics. You are expected to attend and actively participate in each.

#### Seminars

The aim of attending a range of seminars is to broaden your knowledge and provide research inspiration. Weekly presentations in the Biology Seminar Series are held on Wednesdays (1-2 pm). This is a forum for visiting scientists to convey topics of interest to the department and an excellent opportunity for Department members learn about cutting edge research. You are required to attend these seminars during the semester. They will form the basis for the discussion groups, and your blog posts and tweets.

In addition to the Biology Seminar Series you will also be required to attend 3 seminars elsewhere (e.g. other departments at Macquarie University, other universities, museums, botanical gardens or other research oriented institutions).

You will also attend both the MRes and HDR conferences (dates and location will be announced on iLearn).

Taking photographs, filming or recording the audio during these presentations is not permitted, but we strongly recommend taking a notebook/laptop.

#### **Discussions**

Following the seminar you will meet with the speaker as a group and discuss the topic they presented (2-3pm). These discussions allow researchers to explore the topics covered in more

depth, and benefit from the knowledge and thoughts. Proactive participation in a discussion group subsequent to the departmental seminar is required.

On successful completion you will be able to:

- · Learn how science is communicated
- · Gain skills in efficiently understanding a new topic
- · Constructively discuss and critique scientific media
- Attain an understanding on how to network effectively

# Blogging and Tweeting

Due: **Fortnightly** Weighting: **35**%

You will write and post five blogs (using WordPress), and five tweets (using Twitter), based on a seminar in the departmental seminar series in the previous fortnight. You will also submit a text version both your blog and the tweet to a Turnitin link on iLearn. The blogs must (1) summarise the seminar topic, (2) place the seminar in context of the speaker's other work, (3) provide an in depth analyses of how the seminar topic contributes to the field of interest, (3) be pitched at the level of a first year undergraduate student and (4) be accompanied by an effective Tweet. A Science Communication Workshop in Week 1 will cover blogging, Tweeting and podcasting skills and technology.

Blogs will be due fortnightly on Tuesday's at 11.59pm. See iLearn for due dates.

On successful completion you will be able to:

- · Learn how science is communicated
- · Understand process behind enquiry
- · Constructively discuss and critique scientific media
- Attain an understanding on how to network effectively

#### Peer Assessment

Due: TBA

Weighting: 10%

Using the Turnitin Peer Mark tool, you will critically assess 20 blogs (three different blogs from 5 of your peers). The convenor will randomly allocate which blogs you will mark. All blogs will be based on the department seminars. You will have one week to mark each batch of your peers blog. The first blog will be in mock-marked, and we will start this in the Week 3 tutorial, to help you identify effective blogging styles and become familiar with the marking rubric.

Marking completion is due one week after blogs are submitted see iLearn for due dates.

On successful completion you will be able to:

- · Learn how science is communicated
- · Constructively discuss and critique scientific media

#### **Podcast**

Due: **3/6/2018** Weighting: **15%** 

Podcasting is an increasingly popular method of science communication. Based on the external seminars you attend, interviews with the speaker and other researchers in the topic discipline, and your own independent reading you will create a 6 minute popular science podcast, to be uploaded to your WordPress site, a transcript of the podcast will also be uploaded via a Turnitin submission link in iLearn. A Science Communication Workshop in Week 1 will cover blogging, Tweeting and podcasting skills and technology.

Due date 2018: midnight 3/6/2018

On successful completion you will be able to:

- · Learn how science is communicated
- Understand process behind enquiry

# Working group

Due: **12/6/2018** Weighting: **30%** 

In this exercise you will need to prepare a working group proposal for a hypothetical funding body (guidelines provided on iLearn). This will involve identifying (1) a novel topic of interest, (2) which individuals will be invited to attend the working group and (3) a strong argument justifying the importance of research. Make use of the seminars you have seen as a basis for your proposal (combining an interesting question from one speaker with the methods from another, for example). Significant thought will need to be given to this project and students are strongly advised to allocate adequate time to thinking about their proposal through the session.

Due dates 2018: 9am Monday 12/6/2018 (email directly to convenor).

On successful completion you will be able to:

- Understand process behind enquiry
- · Attain an understanding on how to network effectively
- · Develop a process to generate new ideas

# **Delivery and Resources**

#### Website

**Notification of the seminar, speaker and topic will be provided via ilearn.** iLearn and email will be the principle method of communication in this subject. We will also provide materials such

as a link to key paper for each seminar (it will be up to you to do more research), and supporting documents associated with facilitating and participating in discussion groups. Tutorial slides and marking rubrics will also be posted here.

We expect you to use iLearn for:

- Regularly checking subject announcements;
- · Looking up details of speakers
- · Submitting assignments

How do you log in? The URL for the iLearn is: <a href="https://ilearn.mq.edu.au/">https://ilearn.mq.edu.au/</a>. 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 go to<a href="http://mq.edu.au/iLearn/student\_info/index.htm">http://mq.edu.au/iLearn/student\_info/index.htm</a>. If you are having trouble accessing your online unit due to a disability or health condition, please go to the Student Services Website at <a href="http://sss.mq.edu.au/equity/about">http://sss.mq.edu.au/equity/about</a> 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 access to iLearn, <u>Wordpress</u> (online blogging), Twitter, <u>Audacity</u> (free audio editing software) word, a pdf reader and journal articles through the library and the professional websites of speakers.

### **Unit Schedule**

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 at both seminars and discussion groups. All assessments must be completed to pass this course.

## **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-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 <u>Student Policy Gateway</u> (htt <u>ps://students.mq.edu.au/support/study/student-policy-gateway</u>). 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 <u>eStudent</u>. For more information visit <u>ask.m</u> <u>q.edu.au</u>.

### Student Support

Macquarie University provides a range of support services for students. For details, visit <a href="http://students.mq.edu.au/support/">http://students.mq.edu.au/support/</a>

### **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 <u>Disability Service</u> 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 <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> offices\_and\_units/information\_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. 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

- · Gain skills in efficiently understanding a new topic
- · Understand process behind enquiry
- · Constructively discuss and critique scientific media
- Attain an understanding on how to network effectively
- · Develop a process to generate new ideas

#### Assessment tasks

- Participation
- · Blogging and Tweeting
- Podcast
- Working group

### 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

- · Learn how science is communicated
- · Gain skills in efficiently understanding a new topic

#### Assessment tasks

- Participation
- Blogging and Tweeting
- Peer Assessment
- 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 outcomes

- · Gain skills in efficiently understanding a new topic
- · Constructively discuss and critique scientific media
- · Develop a process to generate new ideas

#### Assessment tasks

- Participation
- Working group

### 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

- · Learn how science is communicated
- · Gain skills in efficiently understanding a new topic
- · Understand process behind enquiry
- Attain an understanding on how to network effectively
- · Develop a process to generate new ideas

#### Assessment tasks

Participation

- · Blogging and Tweeting
- Peer Assessment
- Podcast
- Working group

#### 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 outcome

· Learn how science is communicated

#### **Assessment tasks**

- Participation
- · Blogging and Tweeting
- · Peer Assessment
- Podcast

# **Changes since First Published**

Date	Description
30/04/2018	Updated due dates.