



# NSCI7910

## Advanced Scientific Writing

Session 1, In person/Online-scheduled-weekday, North Ryde 2022

*School of Natural Sciences*

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#### Disclaimer

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## General Information

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Credit points

10

Prerequisites

Admission to MRes

Corequisites

Co-badged status

Unit description

This foundation unit focuses on developing key scientific writing skills in (i) critical review and synthesis of literature, (ii) scientific writing style, clarity and succinctness, (iii) bibliography management, (iv) peer review, and (v) grant writing. Students will explore an area of research that they may be unfamiliar with at the outset to produce a short opinion piece, and they will develop a grant proposal.

## 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:** Identify a relevant potential source of research funding and develop a grant proposal to a professional standard

**ULO2:** Demonstrate advanced skills in scientific writing and presentation

**ULO3:** Perform background research and synthesise existing scientific literature

**ULO4:** Construct and critique scientific arguments

**ULO5:** Critically review the work of your peers

**ULO6:** Analyse the ethics associated with your scientific discipline and how it relates to

publishing papers

## General Assessment Information

The new Faculty-wide due time is now 17:00 on the due date.

The new University-wide late penalties run as follows:

0-12 h late: grace period, no penalties

12-24 h late: 10% deducted off the obtained mark, not the total possible marks for the assessment (e.g., if the submitter got 80%, 8% is deducted)

more than 24 h late: 10% more deducted off the obtained mark for each 24-h period or part thereof

more than 5 days late: 100% deducted, meaning that the submitter gets 0

On-campus teaching continues to be scheduled for Session 1, 2022. Masks are compulsory for all classes in indoor spaces and social distancing will be implemented wherever possible. Students will also be required to sanitise surfaces before and after use. If you are not feeling well, by your own responsible judgement, then do not come to class. Join on zoom instead. When you come to class, wear a surgical mask or a N95 mask (preferably one approved by the Therapeutic Goods Administration), not any cloth mask. A *Nature* news item found that cloth masks are half as effective as surgical masks in a field trial.

Students are requested to minimise the risk of spreading COVID to themselves and others in accordance with the university and NSW Health guidelines: <https://www.mq.edu.au/about/corona-virus-faqs> and <https://www.nsw.gov.au/covid-19/stay-safe>.

Any further requirements or changes to units in relation to COVID will be communicated to students via iLearn.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#">News &amp; Views - peer review</a>	10%	No	3 April 2022
<a href="#">Time on task dairy</a>	5%	No	5 June 2022
<a href="#">Grant - pitch</a>	10%	No	9 May 2022
<a href="#">News &amp; Views</a>	20%	No	24 April 2022
<a href="#">News &amp; Views - Annotated bibliography &amp; outline</a>	5%	No	13 March 2022

Name	Weighting	Hurdle	Due
Grant	35%	No	29 May 2022
Ethics / Philosophy of science case study	15%	No	10 April 2022

## News & Views - peer review

Assessment Type <sup>1</sup>: Professional writing

Indicative Time on Task <sup>2</sup>: 7 hours

Due: **3 April 2022**

Weighting: **10%**

You will provide (and receive) constructive peer review on another student's news & views draft.

On successful completion you will be able to:

- Construct and critique scientific arguments
- Critically review the work of your peers

## Time on task dairy

Assessment Type <sup>1</sup>: Reflective Writing

Indicative Time on Task <sup>2</sup>: 7 hours

Due: **5 June 2022**

Weighting: **5%**

Through the session, you will keep a time on task diary. At the end of the session, you will reflect on the time required to perform various tasks, your time management, and identify ways to improve your time management, research planning, and ways to be more efficient in your work.

On successful completion you will be able to:

- Demonstrate advanced skills in scientific writing and presentation

## Grant - pitch

Assessment Type <sup>1</sup>: Presentation

Indicative Time on Task <sup>2</sup>: 14 hours

Due: **9 May 2022**

Weighting: **10%**

You will give an oral presentation pitching your grant proposal idea.

On successful completion you will be able to:

- Identify a relevant potential source of research funding and develop a grant proposal to a professional standard
- Demonstrate advanced skills in scientific writing and presentation
- Perform background research and synthesise existing scientific literature
- Construct and critique scientific arguments

## News & Views

Assessment Type <sup>1</sup>: Professional writing

Indicative Time on Task <sup>2</sup>: 21 hours

Due: **24 April 2022**

Weighting: **20%**

You will write a News & Views style professional writing piece on a current topic in your discipline area. This assessment builds on the annotated bibliography, outline and peer review.

On successful completion you will be able to:

- Identify a relevant potential source of research funding and develop a grant proposal to a professional standard
- Demonstrate advanced skills in scientific writing and presentation
- Perform background research and synthesise existing scientific literature
- Construct and critique scientific arguments

## News & Views - Annotated bibliography & outline

Assessment Type <sup>1</sup>: Annotated bibliography

Indicative Time on Task <sup>2</sup>: 14 hours

Due: **13 March 2022**

Weighting: **5%**

You will prepare an outline for your news and views piece with an annotated bibliography including at least 10 relevant papers including a short description/summary.

On successful completion you will be able to:

- Perform background research and synthesise existing scientific literature
- Construct and critique scientific arguments

## Grant

Assessment Type <sup>1</sup>: Professional writing

Indicative Time on Task <sup>2</sup>: 45 hours

Due: **29 May 2022**

Weighting: **35%**

You will write a grant proposal to a professional standard.

On successful completion you will be able to:

- Identify a relevant potential source of research funding and develop a grant proposal to a professional standard
- Demonstrate advanced skills in scientific writing and presentation
- Perform background research and synthesise existing scientific literature
- Construct and critique scientific arguments

## Ethics / Philosophy of science case study

Assessment Type <sup>1</sup>: Case study/analysis

Indicative Time on Task <sup>2</sup>: 14 hours

Due: **10 April 2022**

Weighting: **15%**

You will complete a case study on an current ethical issue in publishing and/or research collaboration.

On successful completion you will be able to:

- Demonstrate advanced skills in scientific writing and presentation
- Perform background research and synthesise existing scientific literature
- Construct and critique scientific arguments
- Analyse the ethics associated with your scientific discipline and how it relates to publishing papers

<sup>1</sup> 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.

<sup>2</sup> 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

This class will meet on campus weekly but will also have a simultaneous zoom set up in case anyone cannot attend in person, including possibly teachers. Time and place of in-person meeting to be determined.

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](https://policies.mq.edu.au) (<https://policies.mq.edu.au>). 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](#)
- [Assessment Procedure](#)
- [Complaints Resolution Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies](https://students.mq.edu.au/support/study/policies) (<https://students.mq.edu.au/support/study/policies>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit [Policy Central](https://policies.mq.edu.au) (<https://policies.mq.edu.au>) and use the [search tool](#).

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/admin/other-resources/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](https://ask.mq.edu.au) or if you are a Global MBA

student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Academic Integrity

At Macquarie, we believe [academic integrity](#) – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free [online writing and maths support](#), [academic skills development](#) and [wellbeing consultations](#).

## Student Support

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

## The Writing Centre

[The Writing Centre](#) provides resources to develop your English language proficiency, academic writing, and communication skills.

- [Workshops](#)
- [Chat with a WriteWISE peer writing leader](#)
- [Access StudyWISE](#)
- [Upload an assignment to Studiosity](#)
- [Complete the 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

Macquarie University offers a range of [Student Support Services](#) including:

- [IT Support](#)
- [Accessibility and disability support](#) with study
- Mental health [support](#)
- [Safety support](#) to respond to bullying, harassment, sexual harassment and sexual assault
- [Social support including information about finances, tenancy and legal issues](#)

## Student Enquiries

Got a question? Ask us via [AskMQ](#), or contact [Service Connect](#).



## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](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.

## Changes from Previous Offering

This is the first time that this unit is being offered, so that everything is freshly designed.