

AGEN 4001 RESEARCHING OUR CHANGING ENVIRONMENT

Credit Points 10

Coordinator David Ellsworth ([https://directory.westernsydney.edu.au/search/name/David Ellsworth/](https://directory.westernsydney.edu.au/search/name/David%20Ellsworth/))

Description This unit focuses on learning to critically evaluate current research in topics under study at the Hawkesbury Institute for the Environment and how advanced scholarship in your field of study is conducted. The Hawkesbury Institute for the Environment spans a broad set of fields from soil microbial genomics and microbial ecology to the biogeochemistry, ecology and physiology of plants and microbes, animal ecology and evolution, to ecosystems, landscapes and Australia-wide processes. Teaching sessions are designed around a thematic cross-section of research within HIE, representing many of these areas. The unit also involves enhancing skill in evaluating appropriate research methodologies for asking questions and testing hypotheses, including an introduction to some of the large-scale research facilities within HIE that students may be involved with.

School Graduate Research School

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 4 subject

Restrictions Students must be enrolled in program 8083 Bachelor of Research Studies/Master of Research

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Demonstrate knowledge of the various research fields within the Institute in which the student is based.
2. Align the student's statement of intent with a proposed research project relating to the research environment and expertise within the Hawkesbury Institute.
3. Critically analyse theoretical knowledge that will inform key perspectives in the student's research area.
4. Demonstrate understanding of techniques and methods involved in collecting, displaying and interpreting scientific data.
5. Understand how a literature review and a synthesis of data/information are carried out.

Subject Content

- This unit is designed for the Master of Research program, involving first-year Bachelor of Research/ Master of Research students. It exposes students to the research environment within the Hawkesbury Institute for the Environment, the various sub-disciplines within this area of study, and the high-level research approaches taken within each of them.
- The unit will enable students to gain fluency in the various research fields within the Hawkesbury Institute and the literature and methods associated with them by:
- Analysing the research literature in the sub-disciplines encompassed by the Hawkesbury Institute for the Environment and understanding what makes a good journal and a good research manuscript.

- Understanding the advantages and shortcomings of key papers in the literature, and being able to write a critique of others' published research.
- Spending time in discussion and in reading to be able to understand techniques and methods in the field, and critically evaluate them.
- Gaining an understanding of the motivation and research that is conducted within climate change facilities at the Hawkesbury Institute for the Environment.
- Gaining fluency in the literature by practice, and learning the skill of good

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/Group Task
Short written task	1,000 words	30	N	Individual
Long written task	2,500 words	40	N	Individual
Oral Presentation	15-20 mins	30	N	Individual

Teaching Periods

Autumn Hawkesbury Composite

Subject Contact David Ellsworth ([https://directory.westernsydney.edu.au/search/name/David Ellsworth/](https://directory.westernsydney.edu.au/search/name/David%20Ellsworth/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=AGEN4001_22-AUT_HW_C#subjects)