

NATS 1028 SCIENTIFIC LITERACY (BLOCK)

Credit Points 10

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

Description This Subject is designed to provide students with scientific literacy, personal and employability skills and attitudes required to successfully undertake science-related undergraduate studies and to prepare for professional life. Students learn, develop and utilise academic and interpersonal methodologies and approaches within the context of applied scientific principles and take responsibility for their own learning and develop a work ethic. Students are introduced to the contestable and uncertain nature of science and the scientific method that underpins academic integrity and ethical behaviour. Activities encourage development of oral and written communication skills, self-confidence, self-efficacy, creative and critical thinking through problem solving, group process and peer support and assessment. Academic and employability skills include scientific reading and writing, time management, researching scientific information and library skills, oral presentation, taking tests and exams, effective personal and group based learning strategies and approaches to online learning.

School Science

Discipline Natural and Physical Sciences, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 10cp

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

Level Undergraduate Level 1 subject

Equivalent Subjects NATS 1018 Prof Skills for Sci
NATS 1019 Scientific Literacy
NATS 1020 Scientific Literacy (UWSC)

Restrictions

Students must be enrolled in one of the following courses:

7175 – Undergraduate Certificate of Environmental Sustainability

Learning Outcomes

1. Communicate effectively through a written report that meets the professional standards of scientific discipline.
2. Present a structured argument confidently in front of peers, as audience, and assessors.
3. Apply the processes of thinking and writing reflectively to develop the ability of reflecting on their learning.
4. Develop an understanding of the skills and attitudes required for group work interactions.
5. Apply critical thinking to make informed decisions.

Subject Content

1. How to Succeed at University;
2. Academic Research: Finding, Assessing, and Referencing Information;
3. Writing for Scientists;
4. Public Speaking for Scientists;
5. Science is Empirical
6. Science is Inductive

7. Science is Falsifiable;
8. Science is Non-Linear;
9. Science is Quantitative I: Statistics and Probability;
10. Science is Quantitative II: Measurement and Uncertainty;
11. Science is Quantitative III: Data and Computing;
12. Academic Integrity and Ethics;
13. Science, Society and the Environment

Special Requirements

Essential equipment

Students need a computer with reliable internet connection, Microsoft Office, webcam and microphone

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.

Type	Length	Percent	Threshold	Individual/ Group Task
Quiz		15	N	Individual
Portfolio		25	N	Individual
Presentation		20	N	Group
Report		40	N	Individual

Prescribed Texts

Zeegers, P, 2011 Essential skills for science and technology. Revised edn, Oxford University Press, South Melbourne, Vic.