

NATS 1019 SCIENTIFIC LITERACY

Credit Points 10

Legacy Code 300811

Coordinator Luke Barnes (<https://directory.westernsydney.edu.au/search/name/Luke Barnes/>)

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 - Professional Skills for Science
NATS 1020 - Scientific Literacy (WSTC)

Assumed Knowledge

Basic literacy and numeracy.

Learning Outcomes

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

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 Non-Linear

7. Science is Inductive
8. Science is Falsifiable
9. Academic Integrity and Ethics

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	Mandatory
Quiz	10 minutes per lecture	10	N	Individual	N
Log/ Workbook	Part of each tutorial	10	N	Group	N
Presentation	Six minutes	25	N	Individual	N
Report	1,500 words	25	N	Individual	N
Multiple Choice	60 minutes	30	N	Individual	N

Prescribed Texts

- Zeegers, P, Deller-Evans, K, Egege, S and Klinger, C 2011, Essential skills for science and technology, Oxford University Press, Melbourne. (Provided online)
- subject resource document - written by the development team

Teaching Periods

Autumn (2025)

Campbelltown

On-site

Subject Contact Luke Barnes (<https://directory.westernsydney.edu.au/search/name/Luke Barnes/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS1019_25-AUT_CA_1#subjects)

Hawkesbury

On-site

Subject Contact Luke Barnes (<https://directory.westernsydney.edu.au/search/name/Luke Barnes/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS1019_25-AUT_HW_1#subjects)

Parramatta - Victoria Rd

On-site

Subject Contact Luke Barnes (<https://directory.westernsydney.edu.au/search/name/Luke Barnes/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS1019_25-AUT_PS_1#subjects)

Spring (2025)

Campbelltown

Hybrid

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View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS1019_25-SPR_CA_3#subjects)

Hawkesbury

Hybrid

Subject Contact Luke Barnes (<https://directory.westernsydney.edu.au/search/name/Luke Barnes/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS1019_25-SPR_HW_3#subjects)

Parramatta - Victoria Rd

On-site

Subject Contact Luke Barnes (<https://directory.westernsydney.edu.au/search/name/Luke Barnes/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS1019_25-SPR_PS_1#subjects)

Surabaya Semester 1 (2025)

Surabaya

On-site

Subject Contact Luke Barnes (<https://directory.westernsydney.edu.au/search/name/Luke Barnes/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS1019_25-IS1_SU_1#subjects)