

# NATS 1020 SCIENTIFIC LITERACY (WSTC)

**Credit Points** 10

**Legacy Code** 700124

**Coordinator** Sashi Kant ([https://directory.westernsydney.edu.au/search/name/Sashi Kant/](https://directory.westernsydney.edu.au/search/name/Sashi%20Kant/))

**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/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 1 subject

**Equivalent Subjects** NATS 1018 - Professional Skills for Science LGYB 0464 - Professional Skills for Science (UWSC) NATS 1019 - Scientific Literacy

## Restrictions

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory subjects listed in the program structure prior to enrolling in this University level subject. Students enrolled in the combined Diploma/Bachelor programs listed below must pass all College Preparatory subjects listed in the program structure before progressing to the Year 2 subjects.

## Assumed Knowledge

Basic literacy & 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 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

## 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
Reflection	300 words	15	N	Individual	N
Presentation	20 minutes	20	N	Group	N
Report	1000 words	40	N	Individual	N
Quiz	60 minutes	25	N	Individual	N

Teaching Periods

## Term 1 (2025)

### Nirimba Education Precinct

#### On-site

**Subject Contact** Virginia Shepherd ([https://directory.westernsydney.edu.au/search/name/Virginia Shepherd/](https://directory.westernsydney.edu.au/search/name/Virginia%20Shepherd/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS1020\\_25-T1\\_BL\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS1020_25-T1_BL_1#subjects))