

# NATS 0004 ACADEMIC SKILLS FOR SCIENCE (WSTC)

**Credit Points** 10

**Legacy Code** 900101

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

**Description** This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study. Emphasis is placed on developing the key competencies of scientific enquiry - collecting, analysing, organising and communicating information as well as solving problems, particularly when related to using mathematical ideas and techniques.

**School** Western Sydney The College

**Discipline** Natural and Physical Sciences, Not Elsewhere Classified.

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

**Level** Undergraduate Level 0 Preparatory subject

**Equivalent Subjects** NATS 0003 - Academic Skills for Science (UWSCFS)

**Restrictions** Students must be enrolled in a Foundation Studies program at The College.

## Learning Outcomes

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

1. Use both independent and collaborative learning strategies to advance the knowledge of the individual and that of their peers
2. Communicate effectively through the development of critical reading, listening, speaking and writing skills in context
3. Locate and use information technology systems and educational technologies to support learning and assessment
4. Apply critical thinking, and use problem solving skills and research skills, to make informed decisions
5. Apply the process of reflection to learning experiences, in order to assess their own learning styles and ◆learn how to learn◆f.
6. Describe criteria for successful posters and oral presentations and write and evaluate a scientific report.

## Subject Content

Topic 1: Introduction to tertiary study

Topic 2: Blended learning

Topic 3: Advanced tertiary skills

Topic 4: Information skills

Topic 5: Research methods for science and engineering:

- Introduction to scientific methods

- Scientific report writing

- Data handling

- Critical reading

- Research and referencing (journal articles)

- Project report

## 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
Presentation	5 mins	10	N	Individual
Reflection x 3	200 words each	30	N	Individual
Report Part A: Background research related to assigned data : Draft hypothesis, aim – 10%	1000-1200 words	60	N	Individual
Part B: Data analysis and proposed methodology – 10% Part C – Final report – 40%				

Teaching Periods