

NATS 0010 INTERPRETING DATA IN SCIENCE (WSTC PREP)

Credit Points 10

Legacy Code 700287

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

Description Science is a way of knowing about the world. It is a process of discovery whose product, an evolving body of scientific knowledge and technology, is a significant determinant of modern Western societies. Engaging with the content, process, and social functions of science requires foundational scientific literacy, including the ability to access multiple textual forms, to construct meaning, and to critically evaluate new information in a scientific framework. In this subject students will develop skills in scientific literacy through undertaking case studies of contemporary relevance. Emphasis is placed on key competencies in scientific academic writing - collecting, analysing, organising, interpreting and communicating information - as well as solving problems related to 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 fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 0 Preparatory subject

Restrictions

Students must be enrolled at Western Sydney University, The College.

Learning Outcomes

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

1. Demonstrate a command of academic English, including grammar, phrasing, effective sentence structure, spelling and punctuation in a variety of written contexts.
2. Utilise appropriate reading strategies to comprehend academic texts.
3. Demonstrate an understanding of scientific concepts, terminology, principles, concepts and practical techniques.
4. Display an understanding of the benefits and drawbacks of applications of science.
5. Present data in an appropriate manner.
6. Identify and explain patterns in data including anomalies.
7. Interpret various textual forms, including written text, diagrams, graphs and numerical formulae in the context of contemporary case-studies that incorporate concepts from physics, chemistry and biology.
8. Evaluate scientific information in the context of contemporary case-studies that incorporate concepts from physics, chemistry and biology.

Subject Content

1. Interpreting texts and analysing information in relation to sustainability and the environment

2. Synthesis of scientific texts through understanding of scientific history
3. Relating experimental data to scientific concepts
4. Introduction to academic writing in scientific context
5. Interpreting texts and analysing information involving numeracy and concepts from physics, chemistry and biology
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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	40 minutes	10	N	Individual	N
Summary	250 words	20	N	Individual	N
Portfolio	1000 words	40	N	Individual	N
Reflection	700 words	30	N	Individual	N