

Interdisciplinary Science A/T

Learners studying Interdisciplinary Science learn how an understanding of Science is central to the identification of, and solutions to, some of the key issues facing an increasingly globalised society. The subject explores ways in which scientists work collaboratively and individually in a range of integrated fields to increase understanding of an ever-expanding body of interconnected scientific knowledge.

Rationale

Why would you do this course?

Students explore key concepts and models through active enquiry into phenomena and through contexts that exemplify the role of Science in society. Learners who would study this course are typically encouraged and enabled to develop an understanding of the universe through observation, questioning, experimentation, discussion, critical analysis and creative thinking.

Beyond the classroom, this subject offers you:

- Excursions to Taronga and Canberra Zoo
- Excursion to the Space Centre
- Guest speakers/presenters
- Educational experiences from animal experts



Learner dispositions

What type of person usually studies this course?

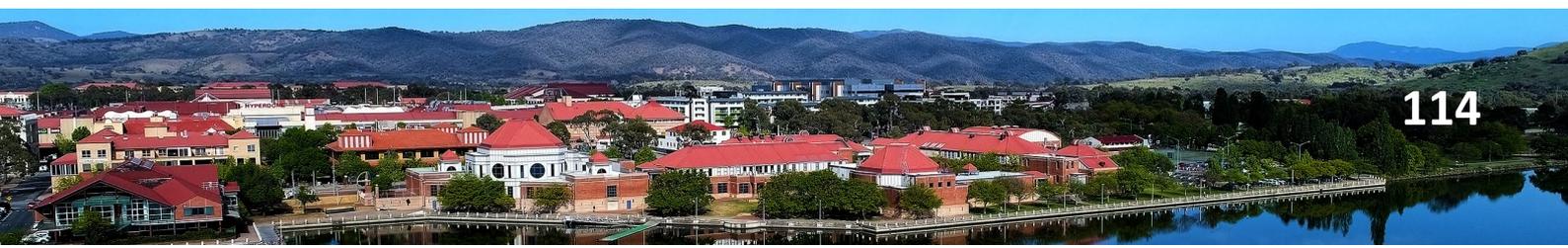
Learners who would study this course are typically interested in studying a science without specialising. They have a passion for a particular stream and want to explore that from different lenses. Interdisciplinary Science is a subject that explores ways in which scientists work collaboratively and individually in a range of integrated fields to increase understanding of an ever-expanding body of scientific knowledge.

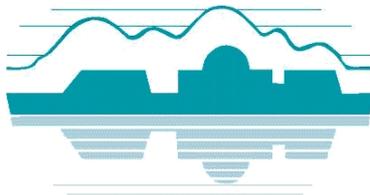
Learners who study this subject have a firm point to transition into work/ study in a career caring for animals, involved in beauty product preparation and application, criminology, policing, disaster management or aeronautics.

Readiness

What courses or previous experience would make a student ready to study this subject at LTC?

You are ready to study this subject if you enjoyed studying science at high school but do not want to specialise into biology, chemistry or physics. No prerequisites are required, and you don't have to be studying another science to study Interdisciplinary Science.





Content and Assessment Overview

Students select one 'stream' of Interdisciplinary Science. Each stream runs for one year. If students decide to study a major in Interdisciplinary Science, they will study two streams. The four streams on offer in 2020 are:

- Animal Science
- Forensic Science
- Cosmetic Science
- The Space Age Science

Students will examine and draw on theories, concepts and principles from different fields within the science disciplines to reach informed conclusions in all units. Each unit has a particular scientific focus that will be a common theme through all streams.

Unit Breakdown and Course Pattern

This course runs in a two-year rotation. Students can therefore start the course in 'Year 2'.

Year 1: Units 1 and 2

Year 2: Units 3 and 4

Example course pattern:

Year	Unit	Stream
11	Unit 1	Animal Science
	Unit 2	Animal Science
12	Unit 3	Forensic Science
	Unit 4	Forensic Science

Unit 1:

In this unit students will study conflicting or seemingly conflicting perceptions of science in a range of contexts. They will appreciate the underlying scientific principles and methodologies applied in justifying claims and how this information is presented and communicated.

Unit 2:

In this unit students will study the application of underlying scientific principles to explain how "things" work. Students will examine the science used in contemporary applications or explore things that happen in everyday life that society takes for granted.

Unit 3:

Students will learn that scientific breakthrough is developed and applied within a context. Students



analyse contextual factors contributing to past discoveries and research such as culture, geography and economics. These contextual factors will be applied in investigation of development and application of contemporary science.

Unit 4:

Students study existing, future or theoretical research and how it can be applied to address an existing or emerging problem. Students will scan broad areas such as sociology, psychology, health, technology and industry to identify problems and proposed solutions.

Types of assessment items:

- Research projects and reports
- Student investigations
- Logbooks
- Presentations
- Exams

For more information, visit the BSSS website, speak to the SLC of **Science/PE**, or visit the LTC website:

http://www.ltc.act.edu.au/Learning/unit_outlines

