



Introductory Science Level 1

Scoping Paper

Years 9 to 12 Learning 2020 Course Development

The purpose of this scoping paper

The purpose of this paper is to provide information regarding the scope of the proposed *Introductory Science Course Level 1* including the:

- *Rationale*
- *Relationship to:*
 - *Senior Secondary Australian Curriculum (where applicable)*
 - *Years 9 to 12 Curriculum Framework*
 - *General Capabilities*
- Existing pathways and possible Future Provision
- Course Design

It is designed to enable all interested stakeholders to reflect and provide initial feedback on the rationale and relationships as italicised above. The additional information is included for noting.

Additionally in consideration of the information provided in this scoping paper we are seeking your suggestions for the core concepts, big ideas, essential learnings or important considerations you would like to see included in this proposed course.



Consultation

Throughout the course development process there will be four opportunities for formal stakeholder consultation:

- Course Scope
- Structural Overview and Key features (November/December 2020)
- Initial Draft Course (March 2021)
- Final Draft Course (June 2021)

This scoping paper represents the first of four course consultation points for teachers to engage in the course development process for *Introductory Science Course Level 1*.

Course Rationale

Introductory Science Level 1 is proposed to provide a learning opportunity at the only level of complexity missing for science: Level 1. It allows for additional entry and exit points, providing equity for all learners to continue mandatory Science from Year 10, the Preliminary Science course or other pathways. Currently over 50% of jobs in Tasmania benefit from a science background (calculated from: <https://economy.id.com.au/tasmania/employment-by-industry>) – and this will only increase.

Introductory Science Level 1 will:

- enable equity of access to Science to all learners, ensuring that learners can include science as part their pathway within Senior Secondary education, no matter what their background.
- provide a flexible course for those not on a university pathway and where their pathway cannot easily be defined within one area of science.
- provide explicit articulation of the General Capabilities, with learner choice embedded, thereby increasing student agency.
- allow learners to negotiate areas of focus where they can gain the greatest benefit from their learning and for their possible future pathways.

There should be opportunities for all learners within their compulsory education until the age of 18 to engage or reengage with all learning areas, including science. It has been identified locally (<https://stem.education.tas.gov.au/>), nationally (<https://www.education.gov.au/review-achieve-educational-excellence-australian-schools>) and internationally (https://en.unesco.org/unesco_science_report) that greater STEM and in this case science, understanding benefits learners, the workforce and the broader community. The inclusion of *Introductory Science Level 1* to fill the existing gap within the learning area of science at complexity Level 1 will ensure that all learners have this opportunity in Years 11 and 12.

Years 9 to 12 Curriculum Framework

[Years 9 to 12 Education Framework](#) informs the design of *Introductory Science Level 1* course and it fits within the Personal Futures focus area of the [Years 9 to 12 Curriculum Framework](#).

Pathways

The *Introductory Science Level 1* course enables learning continuity from the Years 9-10 Australian Curriculum Science to Years 11-12 through sequenced learning pathways.

Relationship to the Senior Secondary Australian Curriculum





Introductory Science Level 1 does not align with any particular course from Senior Secondary Australian Curriculum Science. This course does provide an additional pathway to courses that are based on this Curriculum.

Australian Curriculum General Capabilities

The *Introductory Science* Level 1 course is designed to enable teachers to design courses of study which draw on the cross curriculum priorities and develop the General Capabilities: Literacy, ICT, Critical and Creative Thinking, Ethical Understanding, Personal and Social Capability and Intercultural Understanding.

Relationship to Replacement courses

Introductory Science Level 1 is a new course proposal that fills an identified gap in provision.

Senior Secondary Accreditation Framework






This course will be developed to address the Principles and Standards of the [Senior Secondary Accreditation Framework](#).

Course Design

This proposal is in line with the draft Integrated Policy Model. From the Articulation, extension and enrichment: this is a Level 1 course. This course is 150 hours and will be divided into three equally weighted modules of 50 hours each.

Relationship to possible Future Provision

Learning Area Roadmaps are available on the Years 11 & 12 website: <https://11and12.education.tas.gov.au/learning-area-road-maps/>

FOCUS AREA	P	I	2	3	4
 Discipline-based			Biology Physical Sciences		
 Transdisciplinary			Transdisciplinary Science Environmental Science		
 Professional Studies					Chemistry Physics
 Work-based					
 Personal Futures	Science	Introductory Science			