Government of **Western Australia**
School Curriculum and Standards Authority

SCIENCE IN PRACTICE

General course

Year 12 syllabus – What's changing: General capabilities

For teaching in 2027

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

Background

As part of the Western Australian Certificate of Education (WACE) Refreshment to investigate the assessment and reporting of the general capabilities on the Western Australian Statement of Student Achievement (WASSA), the Authority has updated the statements about the general capabilities in each syllabus.

The Authority has mapped the general capabilities through the unit content and assessment types for each of the WACE courses. Students will have the opportunity to develop the general capabilities identified in the course through the teaching, learning and assessment programs. These general capabilities will be reflected on the WASSA.

Important information

WACE Refreshment: Investigating the assessment and reporting of the general capabilities on the Western Australian Statement of Student Achievement (WASSA)

This document contains information that will be included in the syllabus effective from 1 January 2027.

Users of the syllabus are responsible for checking its currency.

Syllabuses are formally reviewed by the Authority on a cyclical basis, typically every five years.

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Representation of the general capabilities

The general capabilities encompass the knowledge, skills, behaviours and dispositions that will support students to live and work successfully now and into the future. Teachers should find opportunities to incorporate the following capabilities into the teaching and learning program for the Science in Practice General course. The general capabilities are not assessed unless they are identified within the specified unit content.

Critical and creative thinking

Critical and creative thinking is developed in the course as students use scientific method to construct, review and revise questions and hypotheses and design related investigation methods. Science is a creative endeavour and students devise innovative solutions to problems, predict possibilities, envisage consequences and speculate on possible outcomes as they develop their skills and understanding of the course content. When conducting research, constructing scientific arguments, and drawing and justifying conclusions, students use critical thinking skills to consider the accuracy, validity and relevance of information and opinions. They interpret and evaluate data, interrogate and select evidence, and analyse processes, interpretations, conclusions and claims for validity and reliability, including reflecting on their own processes and conclusions.

Digital literacy

Digital literacy is developed in the course as students use a range of strategies to locate, access and evaluate information from multiple digital sources; to collect, analyse and represent data; to model and interpret concepts and relationships; and to communicate and share science ideas, processes and information.

Literacy

Literacy is developed in the course as students refine their skills and understandings related to the four content areas of the course: Scientific Method, Workplace Health and Safety, Scientific Literacy and Science Understanding. Students work in groups to plan and conduct investigations. They gather, interpret, synthesise and critically analyse information presented in a wide range of genres, modes and representations, including text, flow diagrams, symbols, graphs and tables. They evaluate information sources and compare and contrast ideas, information and opinions presented within and between texts. They communicate processes and ideas logically and fluently, both orally and in writing. They construct evidence-based arguments, selecting genres and employing appropriate structures and features to communicate for specific purposes and audiences.

Numeracy

Students develop their numeracy in the course as they apply the wide range of skills associated with the Scientific Method content, including making and recording observations; ordering, representing and analysing data; and interpreting trends and relationships. They employ numeracy skills to interpret complex representations, and to appreciate the ways in which biological and physical systems are structured, interact and change. They engage in analysis of data, including issues relating to accuracy, reliability and probability, and they interpret and manipulate mathematical relationships to calculate and predict values.

Addressing the other general capabilities

Although the following general capabilities have not been identified as a focus in the Science in Practice General Year 12 syllabus, teachers may find opportunities to incorporate these capabilities into the teaching and learning program.

- Ethical understanding
- Intercultural understanding
- Personal and social capability

Such opportunities may occur through the application of different contexts, pedagogical practices and/or assessment strategies that relate to the syllabus as part of the teaching and learning program.

Summary representation of the general capabilities in the Science in Practice General course

A representation of the general capabilities for the two years is summarised in the table below.

Year	Course	Course type	General capabilities						
			CCT	DL	EU	IU	N	L	PSC
Year 11	Science in Practice (GESIP)	General	✓	✓			✓	✓	
Year 12	Science in Practice (GTSIP)	General	✓	✓			✓	✓	

Key
CCT: Critical and creative thinking, DL: Digital literacy, EU: Ethical understanding, IU: Intercultural understanding, L: Literacy, N: Numeracy, PSC: Personal and social capability