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

SCIENCE IN PRACTICE

General course

Year 12 syllabus – What's changing: Rationale and Aims

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 for reviewing the nomenclature of courses, the Authority has updated the rationale and aims of each syllabus.

The revised rationale and aims are aligned with the mapping of the general capabilities to provide clear connections between the rationale, aims and syllabus content. The rationale outlines what the subject is about and why it is important. It describes what students can expect to study in the course, along with the knowledge, skills and understandings they will develop throughout the course. It also explains how these can be applied in everyday life and references potential future pathways, outlining how students might connect what they learn in the course to further education, training and employment opportunities.

Important information

WACE Refreshment: Reviewing the nomenclature of courses

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.

Rationale

The Science in Practice General course develops students' awareness and understanding of science beyond the classroom through authentic, real-world experiences. Students investigate science issues in the context of the world around them and contribute to the discussions related to science issues in the community.

The course is grounded in the belief that science is, in essence, a practical activity. Students explore, experience and learn concepts and practical skills valued in multidisciplinary science, workplaces and other settings. They are encouraged to be reflective and critical thinkers about scientific issues, enabling them to make informed decisions about questions that directly affect their lives and the lives of others.

Science in Practice is founded on knowledge and understanding that has been gained through systematic inquiry, scientific research and practical application. Workplace health and safety practices are embedded and focus on building knowledge and skills in working safely, effectively and efficiently in practical, workplace and real-life situations. Students develop scientific literacy along with a deep understanding of the subject. They are challenged to ask questions and draw evidence-based conclusions using scientific knowledge and practices. Students develop the knowledge and skills to evaluate evidence, solve problems, and communicate understandings in scientific ways.

Students develop knowledge, skills and understandings that they can apply in real-world contexts. They gain a deeper understanding not only of a particular topic or context but also of the link between theory and practice in the real world. With an understanding of science, students are able to make better life decisions, and to be more informed contributors to the discussions related to science issues in the community.

The course builds students' understanding of expectations for work in scientific settings and prepares them for further study and career pathways in scientific settings. The course gives students a grounding in scientific literacy that prepares them to make evidence-based decisions and contributions in the community.

Aims

The Science in Practice General course aims to develop students':

- use of the scientific method for a variety of investigations to demonstrate understanding of the natural and technological world
- application of workplace health and safety requirements and practices while working in the laboratory or the field
- ability to ask questions and draw evidence-based conclusions using scientific knowledge and practices
- use of appropriate terms, conventions and representations to demonstrate understanding of context-specific scientific concepts
- application of knowledge to solve problems and make informed decisions that impact on themselves and society
- use of appropriate representations, multimodal mechanisms and platforms to communicate scientific understandings.