

2026 Queensland Quantum Challenge - Curriculum Alignment to Australian Curriculum V9 – Psychology (for Year 11)

The Psychology Rationale is bolded where there is alignment to the 2026 Queensland Quantum Challenge. The Unit/Syllabus Objectives included provide connections to domains where applications of quantum and advanced technologies are being harnessed to solve problems.

Psychology Rationale

Psychology provides opportunities for students to engage with concepts that explain behaviours and underlying cognitions. In Unit 1, students examine individual development in the form of the role of the brain, cognitive development, human consciousness and sleep. In Unit 2, students investigate the concept of intelligence, the process of diagnosis and how to classify psychological disorder and determine an effective treatment, and lastly, the contribution of emotion and motivation on the individual behaviour. In Unit 3, students examine individual thinking and how it is determined by the brain, including perception, memory, and learning. In Unit 4, students consider the influence of others by examining theories of social psychology, interpersonal processes, attitudes and cross-cultural psychology.

Psychology aims to develop students':

- interest in psychology and their appreciation for how this knowledge can be used to understand contemporary issues
- appreciation of the complex interactions, involving multiple parallel processes that continually influence human behaviour
- **understanding that psychological knowledge has developed over time and is used in a variety of contexts, and is informed by social, cultural and ethical considerations**
- ability to conduct a variety of field research and laboratory investigations involving collection and analysis of qualitative and quantitative data and interpretation of evidence
- **ability to critically evaluate psychological concepts, interpretations, claims and conclusions with reference to evidence**
- **ability to communicate psychological understandings, findings, arguments and conclusions using appropriate representations, modes and genres.**

Senior Psychology

Unit / Syllabus Objectives

Subject Matter

Unit 1:
Individual
Development

Topic 1: The Role of the Brain

- Explain how neuroimaging techniques can be used to enhance the understanding of the structure of the brain and its relationship to cognition, emotion and behaviour

Science as a human endeavour

- Consider that knowledge about the structure and function of the brain has historically been at the expense of risky and invasive practices.
- Appreciate that neuroimaging techniques have improved neuropsychological knowledge, and understanding of the connections between anatomy, physiology and psychology.
- Recognise that understanding localisation of brain function can be used to predict cognitive and behavioural effects of localised damage.