



# PSYCHOLOGY

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ATAR course

**Year 11 syllabus**

## **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.

## **Important information**

This syllabus is effective from 1 January 2025.

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Syllabuses are formally reviewed by the School Curriculum and Standards Authority (the Authority) on a cyclical basis, typically every five years.

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## Rationale

Psychology is the scientific study of how people think, feel and behave. It is an evidence-based discipline that follows the principles of scientific inquiry to explore human cognition, behaviour and thought.

This course introduces students to the principles of scientific inquiry and their application to planning, designing and conducting psychological investigations using appropriate procedures and practices. Students have the opportunity to collect, process, evaluate and critically interpret information from a range of scientific sources, and to evaluate the credibility of these resources. Students will develop an understanding of ethical guidelines and their importance to psychological practice.

Through the study of psychology, students will be introduced to a variety of psychological theories, studies, models and concepts that exist simultaneously and continue to evolve in a variety of contexts. They will learn how to critically evaluate psychological concepts, interpretations, claims and conclusions with reference to empirical evidence.

Students develop the skills to apply their psychological knowledge to familiar and unfamiliar contexts to explain thoughts, feelings and behaviours in the everyday world. On a larger scale, psychological knowledge can help us understand how individuals function within different contexts and how culture shapes people's values, attitudes and beliefs.

Students learn how to construct coherent and logical responses to psychological concepts and understandings using appropriate terminology for a range of audiences, demonstrating a critical awareness of cultural and societal values and expectations.

This course is designed to integrate the understanding of the principles of science inquiry, the acquisition of psychological knowledge and the application of both in an enjoyable and contemporary way. The study of psychology is relevant to further studies in the health professions, education, human resources, social sciences, sales, media, marketing and management.

## Aims

The Psychology ATAR course enables students to:

- understand that psychology is an evidence-based discipline following the principles of scientific inquiry
- collect, process, evaluate and critically interpret information from a range of scientific sources
- demonstrate an understanding of theories and models of psychological concepts that exist simultaneously and continue to evolve
- critically evaluate psychological concepts, interpretations, claims and conclusions with reference to empirical evidence
- apply knowledge, understandings and skills in familiar and unfamiliar contexts to explain thoughts, feelings and behaviours
- design, conduct and evaluate practical science inquiry tasks relevant to psychological knowledge and understandings
- develop the appropriate skills and processes to communicate their understanding of human behaviour to a range of audiences.

## Organisation

This course is organised into a Year 11 syllabus and a Year 12 syllabus. The cognitive complexity of the syllabus content increases from Year 11 to Year 12.

### Structure of the syllabus

The Year 11 syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair. The notional time for each unit is 55 class contact hours.

#### Unit 1 – Biological and lifespan psychology

This unit introduces psychology as an inquiry-based discipline. Students begin to learn concepts associated with psychological theories, studies and models, which develop and change over time, to explain human emotion, cognition and behaviour.

Students learn the basic structure of the central nervous system and some effects of this structure on the way humans think, feel and behave. They are introduced to several methods used to study the brain.

The unit introduces lifespan psychology with a key focus on adolescent development. Students have the opportunity to understand the impact of developmental change on human thoughts, feelings and behaviours. They extend their understanding of developmental processes through learning the role of attachment and identifying stages of development according to specified theorists.

Science inquiry skills developed during Year 7–10 Science are further developed in this unit as students apply these skills to understanding and analysing psychological studies.

#### Unit 2 – Attitudes, stereotypes and social influence

This unit focuses on the influence of others on human behaviour, cognition and emotion. Students explore the function and effect of attitudes and apply the tripartite model of attitude structure to develop a more complex understanding. Students explore theories of cognitive dissonance, social identity and attribution with reference to relevant psychological studies, and apply these theories to real-world experiences.

The unit introduces social influences. Students learn the role of stereotypes and the relationship between attitudes, prejudice and discrimination in a range of areas. They learn about the relationship between social influence and the development of prosocial and antisocial behaviours.

Students extend their understanding of Science inquiry and the way psychological knowledge develops over time and in response to ongoing research.

Each unit includes:

- a unit description – a short description of the focus of the unit
- unit content – the content to be taught and learned, with additional direction provided for theorists and studies included in the unit.

## Organisation of content

The Psychology ATAR course has two interrelated strands: Psychological knowledge and understanding, and Science inquiry. The organisation of the strands provides an opportunity to integrate content in flexible and meaningful ways.

The Psychological knowledge and understanding strand provides the contexts through which particular Science inquiry skills can be developed and understood. The same Science inquiry skills are included in each of the units to provide a common focus for the teaching and learning of content in the Psychological knowledge and understanding strand.

### Psychological knowledge and understanding

Psychological knowledge refers to the theories, studies, models and concepts that have developed over time and continue to evolve in a variety of contexts. It allows for the critical evaluation of psychological concepts, interpretations, claims and conclusions with reference to empirical evidence.

Psychological understanding is the ability to see the relationships between theories, studies, models and concepts and the internal and external factors that influence how humans think, feel and act in familiar and unfamiliar contexts.

### Science inquiry

Science inquiry in Psychology outlines the skills and understandings required of students studying psychology and applies across Units 1–4. Where possible, these understandings should be contextualised within relevant Psychological knowledge and understanding content.



## Advice for teachers

### Safety and wellbeing

The study of psychology may include potentially sensitive topics. Teachers should ensure that students have opportunities to consider topics systematically and objectively, and to become aware of the diversity of views held on such matters.

Students should not be asked to disclose personal information about their own or others' health status and behaviours.

When dealing with sensitive mental health matters, students should be specifically advised that teachers of psychology are neither trained nor equipped to diagnose problems or offer any counselling or therapy.

### Ethical conduct

As part of the study of psychology, students will engage in teaching and learning experiences that may involve experimental investigations using human subjects. Teachers and schools assume the responsibility of exercising a duty of care of students engaging in investigation activities.

It is the moral and legal responsibility of teachers and schools to ensure that students adhere to ethical principles when engaged in investigation activities. These may include protection from harm, gaining informed consent, and ensuring confidentiality and anonymity. The following documents provide further advice for teachers:

- the National Statement on Ethical Conduct in Human Research (2007), issued by the National Health and Medical Research Council (NHMRC) in accordance with the *NHMRC Act 1992 (Cwlth)* at [www.nhmrc.gov.au/guidelines-publications/e72](http://www.nhmrc.gov.au/guidelines-publications/e72)
- the National Privacy Principles in the *Privacy Amendment (Private Sector) Act 2000 (Cwlth)* at [www.privacy.gov.au](http://www.privacy.gov.au)
- the Code of Ethics of the Australian Psychological Society (APS) at [www.psychology.org.au](http://www.psychology.org.au).

## Mathematical skills expected of students studying the Psychology ATAR course

The Psychology ATAR course requires students to use the mathematical skills they have developed through the Year 7–10 Mathematics Curriculum, in addition to the numeracy skills they have developed through the Science inquiry strand of the Year 7–10 Science Curriculum.

Within the Science inquiry strand of the Psychology ATAR course, students are required to gather, represent and analyse numerical data to identify the evidence that forms the basis of scientific arguments, claims or conclusions. In gathering and recording numerical data, students are required to make measurements using appropriate units to an appropriate degree of accuracy.

It is assumed that students will be able to:

- perform calculations involving addition, subtraction, multiplication and division of quantities
- calculate percentages
- translate information between graphical and numerical forms
- construct and interpret data displays, such as graphs and tables
- describe and compare data sets using mean and median
- interpret the slope of a linear graph.

## Progression from the Year 7–10 curriculum

This syllabus continues to develop science inquiry skills, building on those acquired in the Year 7–10 Science Curriculum. Science inquiry involves identifying and posing questions; planning, conducting and reflecting on investigations; processing, analysing and interpreting data; and communicating findings. Science inquiry is also concerned with evaluating claims, investigating ideas, solving problems, reasoning, drawing valid conclusions and developing evidence-based arguments.

## Representation of the general capabilities

The general capabilities encompass the knowledge, skills, behaviours and dispositions that will assist students to live and work successfully in the twenty-first century. Teachers may find opportunities to incorporate the capabilities into the teaching and learning program for the Psychology ATAR course. The general capabilities are not assessed unless they are identified within the specified unit content.

### Literacy

Students develop literacy skills as they are introduced to and become familiar with the specific discourse used in psychology. This course provides a specific and rich context for students to develop reading and writing abilities and skills in viewing and speaking, as they apply language in different contexts and for different purposes. Students develop literacy capability as they learn key research and investigative skills which enhance their ability to access, interpret, analyse and challenge information, and evaluate the changing knowledge base in psychology. Students use language structures to formulate hypotheses, relate information, provide explanations and construct evidence-based arguments. Students communicate research findings using multiple ways of representing data to articulate and illustrate relationships they have observed or constructed.

## **Numeracy**

Students develop numeracy skills as they consider and evaluate psychological research, including the ability to display, interpret and analyse quantitative data to draw evidence-based conclusions and evaluate research.

## **Information and communication technology capability**

In the Psychology ATAR course, students develop and apply information and communication technology (ICT) capability as they learn to effectively and appropriately access, create and communicate information and ideas, solve problems and work collaboratively. Students research psychological concepts, collect and analyse data and communicate understandings using a range of technologies.

## **Critical and creative thinking**

Students develop critical and creative thinking as they learn to generate and evaluate knowledge, clarify concepts and ideas, consider alternatives and solve problems. In this course, critical and creative thinking is embedded in the skills of planning, conducting, processing and evaluating psychological research. Students generate and examine hypotheses, make predictions, solve problems, and analyse and evaluate evidence.

## **Personal and social capability**

Psychology seeks to explain how individuals think, feel and act. In this course, students develop personal and social capabilities as they engage in the study of key theories which seek to explain how emotions, self-understanding and relationships influence decisions and actions. Personal and social capability is also enhanced as students apply psychological knowledge to make informed choices about issues that impact their lives, and consider the application of psychological concepts to meet a range of personal and social needs.

## **Ethical understanding**

In this course, students learn about key psychological theories and the way in which the rights, integrity and propriety of people who are the subject of psychological research are held in high regard. Students develop the capacity to form and make ethical judgements through the study of ethics in psychology, and explore and apply ethical guidelines as they engage in planning, conducting, processing and evaluating psychological research.

## **Intercultural understanding**

Cultural attitudes and perspectives are important influences on behaviour and relationship development. Students examine how culture impacts on beliefs, attitudes and practices.

## Representation of the cross-curriculum priorities

The cross-curriculum priorities address contemporary issues which students face in a globalised world. Teachers may find opportunities to incorporate the priorities into the teaching and learning program for the Psychology ATAR course. The cross-curriculum priorities are not assessed unless they are identified within the specified unit content.

### Aboriginal and Torres Strait Islander histories and cultures

Aboriginal and Torres Strait Islander peoples have longstanding scientific traditions. They have developed knowledge about the world through observation, prediction, creating hypotheses and making generalisations. In this course, scientific methods which propose to explain human behaviour are consistent with those which have been practised and transmitted in Aboriginal and Torres Strait Islander cultures from one generation to the next. The study of the scientific method used in psychology has close links to the way in which Aboriginal and Torres Strait Islander peoples view their world and, therefore, contributes to a better understanding of Aboriginal and Torres Strait Islander histories and cultures.

### Asia and Australia's engagement with Asia

Asia and Australia's engagement with Asia provide rich and engaging contexts for developing students' scientific knowledge, understanding and skills. In this course, students learn about the diversity of cultures, traditions and beliefs and their impact on human behaviour, including the influence of traditional and contemporary Asian cultures.

### Sustainability

Through the process of science inquiry, students identify and understand relationships between variables and the notion of cause and effect. They develop skills in observation and analysis which enable them to examine relationships in the world around them and appreciate the contribution of science toward the development of a sustainable future.

# Unit 1 – Biological and lifespan Psychology

## Unit description

This unit introduces psychology as an inquiry-based discipline. Students begin to learn concepts associated with psychological theories, studies and models, which develop and change over time, to explain human emotion, cognition and behaviour.

Students learn the basic structure of the central nervous system and some effects of this structure on the way humans think, feel and behave. They are introduced to several methods used to study the brain.

The unit introduces lifespan psychology with a key focus on adolescent development. Students have the opportunity to understand the impact of developmental change on human thoughts, feelings and behaviours. They extend their understanding of developmental processes through learning the role of attachment and identifying stages of development according to specified theorists.

Science inquiry skills developed during Year 7–10 Science are further developed in this unit as students apply these skills to understanding and analysing psychological studies.

## Unit content

This unit includes the knowledge, understandings and skills described below. For named theorists in this unit (Piaget, Bowlby), students should demonstrate an understanding of:

- the specified characteristics and features of their theory
- the strengths and limitations of their theory
- the application of their theory to a real-world context.

For designated studies in this unit (Harlow, 1958; Ainsworth, 1978), students should demonstrate an understanding of:

- the aim of the study
- the method used in the study
- the key findings of the study
- the contribution of the study to psychology
- criticisms/limitations of the study (e.g. findings, methods or ethics).

The purpose of including studies is to explicitly link the process of Science inquiry to the development of psychological theory. Students are not expected to read or memorise published studies written for postgraduate publications. Age-appropriate sources and teacher instruction ensure that the key information listed for studies is provided.

## Psychological knowledge and understanding

### Biological psychology

- structural organisation of the nervous system
  - central nervous system – brain and spinal cord
  - peripheral nervous system – somatic and autonomic
- role of the functional divisions of the peripheral nervous system
  - autonomic – sympathetic and parasympathetic
  - somatic – sensory and motor
- features of neurons
  - structure and function of the neuron – dendrites, soma/cell body, axon, axon terminals, myelin sheath
  - functions of sensory, motor and interneurons
- neural transmission
  - direction of transmission
  - electro-chemical signal
  - role of the synapse
  - role of neurotransmitters
- location, structure and function of the brain
  - hindbrain – medulla, cerebellum
  - midbrain – reticular formation
  - forebrain – hypothalamus, thalamus
  - cerebral cortex
    - left and right hemispheres – contralateral control of the body
    - corpus callosum
    - lobes of the brain – frontal, parietal, temporal, occipital
    - localisation of functions – Broca's area, Wernicke's area, pre-frontal cortex, primary motor cortex, primary sensory cortex, primary auditory cortex, primary visual cortex
- historical research on the structure and function of the brain
  - Phineas Gage – case study illustrating localisation of lobe function
  - Roger Sperry (1959–1968) – role of the corpus callosum using split-brain experiments
  - Walter Freeman (1936–1945) – role of the pre-frontal cortex using frontal lobotomy
- applications of contemporary methods to improve knowledge of brain structure and function
  - electroencephalogram (EEG)
  - computed tomography (CT)
  - magnetic resonance imaging (MRI)
  - functional magnetic resonance imaging (fMRI)

## Lifespan psychology

- developmental stages across the lifespan – infancy, childhood, adolescence, early adulthood, middle age, older age
  - changes across developmental stages
    - physical (gross and fine motor skills)
    - cognitive (language)
    - social and emotional development
- role of neural plasticity in development through the lifespan
  - adaptive and developmental plasticity
  - stages of plasticity – proliferation, migration, synaptogenesis, synaptic pruning, myelination
  - effect of changes in brain structures during adolescence – amygdala and pre-frontal cortex
- domains of development
  - theory of cognitive development – Piaget (1936)
    - process of schema formation – assimilation, accommodation, equilibrium and disequilibrium
    - stages and developmental changes
      - sensorimotor – object permanence
      - pre-operational – egocentrism, animism, symbolic thinking, centration
      - concrete operational – conservation, seriation
      - formal operational – abstract thinking
    - use of Piagetian tasks to determine developmental changes
      - invisible displacement
      - three mountains
      - conservation
      - pendulum problem
  - theories of social and emotional development – attachment
    - study: emotion over physiological needs with Rhesus monkeys (Harlow, 1958)
    - theory of attachment – Bowlby (1969, 1988)
      - definition of attachment
      - evolutionary perspective
      - monotropy, critical and sensitive periods, maternal deprivation, internal working model
    - study: Strange situation to measure attachment (Ainsworth, 1978)
      - Type A – insecure avoidant attachment
      - Type B – secure attachment
      - Type C – insecure resistant attachment
    - findings about cross-cultural patterns of attachment according to van Ijzendoorn and Kroonenberg (1988)
  - impact of enriched and deprived environments on development
    - case study – wild/feral child, such as Genie, the wild child

## Science inquiry

### Ethical guidelines and practices for psychological research

- the role of ethics/ethical guidelines in psychological research
  - the role of ethics committee approval and monitoring of conduct for all psychological research
- understand and apply ethical guidelines and practices related to human participants
  - protection from harm – physical and psychological
  - informed consent
  - withdrawal rights
  - deception
  - confidentiality
  - privacy
  - voluntary participation
  - debriefing
- use of animals in research
  - replacement, reduction, refinement

### Formulating research

- identify the aim/s of the research
- identify variables
  - independent
  - dependent
  - control
  - extraneous – participant, environment, researcher
  - confounding
- construct/formulate a hypothesis and/or inquiry question
  - directional and non-directional hypothesis (quantitative)
  - inquiry questions (qualitative)

### Methodology

- types of research designs – application, method, strengths and limitations
  - experimental (control and experimental group)
  - non-experimental
    - observational
    - case study
    - correlational
    - longitudinal
    - cross-sectional
- selection of participants
  - identification of sample and population
  - methods to sample participants – application, method, strengths and limitations
    - convenience sampling



- snowballing
- random sampling
- stratified sampling
- allocation of participants – application, method, strengths and limitations
  - random allocation
- sources and effects of extraneous variables and confounding variables
  - placebo effect
  - experimenter effect
  - demand characteristics
- minimise the effects of extraneous and confounding variables
  - random allocation of participants
  - use of a placebo
  - single-blind and double-blind procedures
  - standardisation of procedures and instructions

### **Data collection**

- types of data
  - qualitative data
  - quantitative data
- methods of data collection – application, strengths and limitations
  - qualitative
    - interviews – focus group and individual; structured, semi-structured
    - open-ended survey
  - quantitative
    - objective physiological measures – heart rate, breathing rate, galvanic skin response (GSR)
    - subjective measures – rating scales, such as Likert scales
  - mixed methods – data collection may be a combination of qualitative and quantitative data
- differences between subjective and objective data

### **Processing and analysing data**

- construct and interpret data displays
  - graphs – scatterplot, column, line, histogram
  - tables – summary, frequency
- calculate and interpret the mean and median as measures of central tendency
- interpret Pearson's correlation coefficient as a measure of strength and direction of linear relationships

### **Drawing conclusions**

- evidence-based conclusions consistent with psychological evidence and relevant to the hypothesis or inquiry question

### **Evaluation of research**

- application and use of the concept of validity as a measure of evaluating research
  - internal validity
  - external validity
- application and use of the concept of reliability as a measure of evaluating research
  - test-retest reliability
  - inter-rater reliability
- generalisability of sample to the population
- suggest relevant improvements to address limitations of research
- ethical implications
- critical evaluation of information from a range of scientific sources

### **Communicating**

- use appropriate psychological terminology
- acknowledge sources of information using appropriate referencing

## Unit 2 –Attitudes, stereotypes and social influence

### Unit description

This unit focuses on the influence of others on human behaviour, cognition and emotion. Students explore the function and effect of attitudes and apply the tripartite model of attitude structure to develop a more complex understanding. Students explore theories of cognitive dissonance, social identity and attribution, with reference to relevant psychological studies, and apply these theories to real-world experiences.

The unit introduces social influences. Students learn the role of stereotypes and the relationship between attitudes, prejudice and discrimination in a range of areas. They learn about the relationship between social influence and the development of prosocial and antisocial behaviours.

Students extend their understanding of Science inquiry and the way psychological knowledge develops over time and in response to ongoing research.

### Unit content

This unit builds on the content covered in Unit 1.

This unit includes the knowledge, understandings and skills described below.

For named theorists in this unit (Festinger; Tajfel and Turner), students should demonstrate an understanding of:

- the specified characteristics and features of their theory
- the strengths and limitations of their theory
- the application of their theory to a real-world context.

For designated studies in this unit (Festinger and Carlsmith, 1959; Sherif et al., 1954; Milgram, 1963; Asch, 1951; Latane and Darley, 1968), students should demonstrate an understanding of:

- the aim of the study
- the method used in the study
- the key findings of the study
- the contribution of the study to psychology
- criticisms/limitations of the findings (e.g. findings, methods or ethics).

The purpose of including studies is to explicitly link the process of Science inquiry to the development of psychological theory. Students are not expected to read or memorise published studies written for postgraduate publications. Age-appropriate sources and teacher instruction ensure that the key information listed for studies is provided.

## Psychological knowledge and understanding

### Attitudes and stereotypes

- function of attitudes – implicit and explicit
- tripartite model of attitude structure – affective, behavioural, cognitive
- effect of attitudes on behaviour
  - theory of cognitive dissonance – Festinger
    - effect of cognitive dissonance on behaviour – avoidance, reduction, rationalisation
    - magnitude as a factor affecting cognitive dissonance
    - ways cognitive dissonance is reduced – change beliefs, change behaviour, change perception of the action
    - study: Cognitive consequences of forced compliance (Festinger and Carlsmith, 1959)
- attribution theory to explain behaviour
  - situational and dispositional attributions
    - fundamental attribution error
    - self-serving bias and group-serving bias
- social identity theory – Tajfel and Turner (1979)
  - social categorisation, social identification, social comparison
- stereotypes as a form of social categorisation
  - function of stereotypes
- relationship between attitudes, prejudice and discrimination
  - distinguish between prejudice and discrimination
  - direct and indirect discrimination
  - examples of prejudice and discrimination in society – gender, race, ethnicity, age, disability, mental illness
  - causes of prejudice – social influence, intergroup competition, social categorisation, just world phenomenon
  - reducing prejudice – contact hypothesis including intergroup contact; superordinate goals, mutual interdependence, equal-status contact
  - study: Robbers Cave experiment (Sherif et al., 1954)

### Social influences

- social influence theory (Kelman, 1958)
  - compliance
  - identification
  - internalisation
- obedience
  - social response to authority
  - study: Behavioural study of obedience (Milgram, 1963)

- conformity
  - factors affecting conformity – normative and informational influence, culture, group size, unanimity, deindividuation
  - study: Line judgment task (Asch, 1951)
- antisocial behaviour in response to social influence
  - factors influencing antisocial behaviour – diffusion of responsibility, audience inhibition, social influence, cost–benefit analysis, groupthink
  - concept of bystander effect
  - study: Group inhibition of bystander intervention in emergencies – smoke filled room (Latane and Darley, 1968)
  - bullying as an example of antisocial behaviour
- prosocial behaviour in response to social influence
  - factors influencing prosocial behaviour – reciprocity principle, social responsibility, personal characteristics (empathy, mood, competence, altruism)
  - helping as an example of prosocial behaviour

## Science inquiry

### Ethical guidelines and practices for psychological research

- the role of ethics/ethical guidelines in psychological research
  - the role of ethics committee approval and monitoring of conduct for all psychological research
- understand and apply ethical guidelines and practices related to human participants
  - protection from harm (physical and psychological)
  - informed consent
  - withdrawal rights
  - deception
  - confidentiality
  - privacy
  - voluntary participation
  - debriefing
- use of animals in research
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### Formulating research

- identify the aim/s of the research
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  - non-experimental
    - observational
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    - correlational
    - longitudinal
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- selection of participants
  - identification of sample and population
  - methods to sample participants – application, method, strengths and limitations
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    - snowballing
    - random sampling
    - stratified sampling
- allocation of participants – application, method, strengths and limitations
  - random allocation
- sources and effects of extraneous variables and confounding variables
  - placebo effect
  - experimenter effect
  - demand characteristics
- minimise the effects of extraneous and confounding variables
  - random allocation of participants
  - use of a placebo
  - single-blind and double-blind procedures
  - standardisation of procedures and instructions

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    - open-ended survey
  - quantitative
    - objective physiological measures – heart rate, breathing rate, galvanic skin response (GSR)

- subjective measures – rating scales, such as Likert scales
- mixed methods – data collection may be a combination of qualitative and quantitative data
- differences between subjective and objective data

### **Processing and analysing data**

- construct and interpret data displays
  - graphs – scatterplot, column, line, histogram
  - tables – summary, frequency
- calculate and interpret the mean and median as measures of central tendency
- interpret Pearson's correlation coefficient as a measure of strength and direction of linear relationships

### **Drawing conclusions**

- evidence-based conclusions consistent with psychological evidence and relevant to the hypothesis or inquiry question

### **Evaluation of research**

- application and use of the concept of validity as a measure of evaluating research
  - internal validity
  - external validity
- application and use of the concept of reliability as a measure of evaluating research
  - test-retest reliability
  - inter-rater reliability
- generalisability of sample to the population
- suggest relevant improvements to address limitations of research
- ethical implications
- critical evaluation of information from a range of scientific sources

### **Communicating**

- use appropriate psychological terminology
- acknowledge sources of information using appropriate referencing

## Assessment

Assessment is an integral part of teaching and learning that, at the senior secondary years:

- provides evidence of student achievement
- identifies opportunities for further learning
- connects to the standards described for the course
- contributes to the recognition of student achievement.

Assessment for learning (formative) and assessment of learning (summative) enable teachers to gather evidence to support students and make judgements about student achievement. These are not necessarily discrete approaches and may be used individually or together, and formally or informally.

Formative assessment involves a range of informal and formal assessment procedures used by teachers during the learning process in order to improve student achievement and to guide teaching and learning activities. It often involves qualitative feedback (rather than scores) for both students and teachers, which focuses on the details of specific knowledge and skills that are being learnt.

Summative assessment involves assessment procedures that aim to determine students' learning at a particular time; for example, when reporting against the standards, after completion of a unit/s. These assessments should be limited in number and made clear to students through the assessment outline.

Appropriate assessment of student work in this course is underpinned by reference to the set of pre-determined course standards. These standards describe the level of achievement required to achieve each grade, from A to E. Teachers use these standards to determine how well a student has demonstrated their learning.

Where relevant, higher-order cognitive skills (e.g. application, analysis, evaluation and synthesis) and the general capabilities should be included in the assessment of student achievement in this course. All assessment should be consistent with the requirements identified in the course assessment table.

Assessment should not generate workload and/or stress that, under fair and reasonable circumstances, would unduly diminish the performance of students.



## School-based assessment

The *Western Australian Certificate of Education (WACE) Manual* contains essential information on principles, policies and procedures for school-based assessment that must be read in conjunction with this syllabus.

School-based assessment involves teachers gathering, describing and quantifying information about student achievement.

Teachers design school-based assessment tasks to meet the needs of students. As outlined in the *WACE Manual*, school-based assessment of student achievement in this course must be based on the Principles of Assessment:

- Assessment is an integral part of teaching and learning
- Assessment should be educative
- Assessment should be fair
- Assessment should be designed to meet its specific purpose/s
- Assessment should lead to informative reporting
- Assessment should lead to school-wide evaluation processes
- Assessment should provide significant data for improvement of teaching practices.

The table below provides details of the assessment types and their weighting for the Psychology ATAR Year 11 syllabus.

Summative assessments in this course must:

- be limited in number to no more than eight tasks
- allow for the assessment of each assessment type at least once over the year/pair of units
- have a minimum value of 5 per cent of the total school assessment mark
- provide a representative sampling of the syllabus content.

Assessment tasks not administered under test or controlled conditions require appropriate authentication processes.

## Assessment table – Year 11

Type of assessment	Weighting
<p><b>Science inquiry</b> Students develop questions; plan, design and conduct psychological investigations and research using appropriate ethical procedures and practices; collect, process, evaluate and critically interpret information; draw evidence-based conclusions consistent with psychological evidence; and communicate findings. At least one practical and one research inquiry must be completed over the pair of units.</p> <ul style="list-style-type: none"> <li>• Practical Students collect qualitative and/or quantitative data using experimental and/or non-experimental research designs; process, analyse, evaluate and communicate findings.</li> <li>• Research Referring to contemporary or seminal research, students analyse psychological evidence in response to an inquiry question or hypothesis. They evaluate the evidence and explain its findings relevant to psychological knowledge and understandings.</li> </ul>	30%
<p><b>Response</b> Students apply knowledge and understanding of psychological theories, studies, models and concepts to explain and predict human behaviour, and apply these to familiar and unfamiliar contexts; interpret psychological and/or media texts; and evaluate processes, claims and conclusions by considering the quality of evidence. Students have the opportunity to demonstrate a range of communication skills and processes to convey psychological understandings to a range of audiences. Evidence can include scenario-based analysis; reflective writing, e.g. diaries, logs, analysis of media texts; video and/or audio recordings; digital representations; oral presentations; observations; role-play; excursion reports; creation of models; debates and discussions; public awareness campaigns; extended responses; and short answer tests.</p>	40%
<p><b>Examination</b> Typically conducted at the end of each semester and/or unit. In preparation for Units 3 and 4, the examination should reflect the examination design brief included in the ATAR Year 12 syllabus for this course.</p>	30%

Teachers must use the assessment table to develop an assessment outline for the pair of units (or for a single unit where only one is being studied).

The assessment outline must:

- include a set of assessment tasks
- include a general description of each task
- indicate the unit content to be assessed
- indicate a weighting for each task and each assessment type
- include the approximate timing of each task (for example, the week the task is conducted, or the issue and submission dates for an extended task).

## Reporting

Schools report student achievement, underpinned by a set of pre-determined standards in terms of the following grades:

Grade	Interpretation
A	Excellent achievement
B	High achievement
C	Satisfactory achievement
D	Limited achievement
E	Very low achievement

The grade descriptions for the Psychology ATAR Year 11 syllabus are provided in Appendix 1. They are used to support the allocation of a grade. They can also be accessed, together with annotated work samples, on the course page of the Authority website at [www.scsa.wa.edu.au](http://www.scsa.wa.edu.au).

To be assigned a grade, a student must have had the opportunity to complete the education program, including the assessment program (unless the school accepts that there are exceptional and justifiable circumstances).

Refer to the *WACE Manual* for further information about the use of a ranked list in the process of assigning grades.

The grade is determined by reference to the standard, not allocated on the basis of a pre-determined range of marks (cut-offs).

## Appendix 1 – Grade descriptions Year 11\*

A	<p><b>Psychological knowledge and understanding</b> Accurately describes and explains, in detail, a variety of psychological theories, studies, models and concepts, including relevant strengths and limitations.</p> <p>Accurately describes and explains, in detail, relevant psychological theories, studies, models and concepts applied to a variety of familiar and unfamiliar contexts.</p>
	<p><b>Science inquiry</b> Accurately describes and explains, in detail, the application of relevant ethical guidelines in a variety of familiar and unfamiliar contexts.</p> <p>Accurately describes and explains, in detail, research designs, methods for selecting and allocating participants, and methods for minimising the effects of extraneous and confounding variables in familiar and unfamiliar contexts.</p> <p>Accurately organises data into a variety of clearly presented and appropriate forms.</p> <p>Accurately describes and explains data from a variety of sources, linked to evidence-based conclusions consistent with evidence and relevant to the research question.</p> <p>Accurately describes and explains, in detail, relevant strengths and limitations of research from a variety of scientific sources and suggests relevant improvements.</p>
	<p><b>Communication</b> Accurately uses a variety of appropriate psychological terminology relevant to theories, studies, concepts and models fluently and in a clear and logical way.</p>
B	<p><b>Psychological knowledge and understanding</b> Accurately describes, in detail, a variety of psychological theories, studies, models and concepts, including relevant strengths and limitations.</p> <p>Accurately describes, in detail, the application of relevant psychological theories, studies, models and concepts to a variety of familiar and unfamiliar contexts.</p>
	<p><b>Science inquiry</b> Accurately describes, in detail, the application of relevant ethical guidelines in a variety of familiar and unfamiliar contexts.</p> <p>Accurately describes, in detail, research designs, methods for selecting and allocating participants, and methods for minimising the effects of extraneous and confounding variables, in familiar and unfamiliar contexts.</p> <p>Accurately organises data into clearly presented and appropriate forms.</p> <p>Accurately describes data from a variety of sources, linked to evidence based conclusions consistent with evidence and relevant to the research question.</p> <p>Accurately describes, in detail, relevant strengths and limitations of research from a variety of scientific sources and suggests relevant improvements.</p>
	<p><b>Communication</b> Accurately uses a variety of appropriate psychological terminology relevant to theories, studies, concepts and models in a clear and logical way.</p>

C	<p><b>Psychological knowledge and understanding</b> Accurately describes a variety of psychological theories, studies, models and concepts.</p> <p>Accurately describes the application of relevant psychological theories, studies, models and concepts to a variety of familiar and unfamiliar contexts.</p>
	<p><b>Science inquiry</b> Accurately describes the application of relevant ethical guidelines in familiar and unfamiliar contexts.</p> <p>Accurately describes research designs, methods for selecting and allocating participants, and methods for minimising the effects of extraneous and confounding variables, in familiar and some unfamiliar contexts.</p> <p>Organises data into appropriate forms that may lack clarity.</p> <p>Describes data from a variety of sources referring to some evidence relevant to the research question.</p> <p>Describes strengths and limitations of research from a variety of scientific sources and suggests improvements.</p>
	<p><b>Communication</b> Accurately uses a variety of everyday language relevant to theories, studies, concepts and models in a clear way.</p>

D	<p><b>Psychological knowledge and understanding</b> Identifies some psychological theories, studies, models and concepts.</p> <p>Identifies that relevant psychological theories, studies, models and concepts can be applied to familiar contexts.</p>
	<p><b>Science inquiry</b> Identifies relevant ethical guidelines in familiar contexts.</p> <p>Identifies research designs, methods for selecting and allocating participants, and methods for minimising the effects of extraneous and confounding variables, in familiar contexts.</p> <p>Attempts to organise data.</p> <p>Identifies data from a variety of sources.</p> <p>Identifies strengths and limitations of research and suggests improvements.</p>
	<p><b>Communication</b> Uses everyday language with limited relevance to theories, studies, models and concepts.</p>

E	Does not meet the requirements of a D grade and/or has completed insufficient assessment tasks to be assigned a higher grade.
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\* These grade descriptions will be reviewed at the end of the second year of implementation of this syllabus.

