

Government of Western Australia School Curriculum and Standards Authority

# **Psychology**

ATAR course Year 12 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 2024.

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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 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

### Unit 3 – Memory and learning

Cognitive psychology is concerned with the process of how human beings develop understanding and apply this to the world in which they live. Memory and learning form core components of cognitive psychology. Various theories of memory and learning have been developed based on psychological research.

In this unit, students learn the roles of sensation, perception and attention in memory. They further develop understanding of memory by applying models, understanding how specific structures of the brain affect memory, and learning about some of the processes associated with memory and forgetting.

The unit explores theories of learning, including classical conditioning, operant conditioning and social learning theory, in the context of key studies. Students apply learning theories in behaviour modification to real-world contexts.

Science inquiry skills are further developed in this unit, as is the understanding that psychological knowledge develops over time and in response to ongoing research.

#### Unit 4 – Psychology of motivation, wellbeing and health

A key concern in psychology is developing the understanding of human cognition, emotion and behaviour to inform improvements in the wellbeing of individuals and groups in society. In this unit, students develop a psychological understanding of the relationship between motivation and wellbeing, and apply this to the development of effective strategies related to stress and sleep.

This unit uses analysis of theories and models associated with motivation and wellbeing to establish psychological understandings of these concepts. It introduces some elements of the relationships between stress, sleep and wellbeing. Students learn psychological models and techniques to improve wellbeing in these contexts.

The unit emphasises the role and relevance of Science inquiry, where the psychological research is applied to contemporary concerns.

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 <u>https://www.nhmrc.gov.au/guidelines-publications/e72</u>
- the National Privacy Principles in the *Privacy Amendment (Private Sector) Act 2000 (Cwlth)* at <u>www.privacy.gov.au</u>
- the Code of Ethics of the Australian Psychological Society (APS) at <u>www.psychology.org.au</u>.

# 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 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.

### **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.

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### 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 3 – Memory and learning

# **Unit description**

Cognitive psychology is concerned with the process of how human beings develop understandings and apply this to the world in which they live. Memory and learning form core components of cognitive psychology.

Various theories of memory and learning have been developed based on psychological research.

In this unit, students learn the roles of sensation, perception and attention in memory. They further develop understanding of memory by applying models, understanding how specific structures of the brain affect memory, and learning about some of the processes associated with memory and forgetting.

Theories of learning, including classical conditioning, operant conditioning and social learning theory, are explored in the context of key studies. Students apply learning theories in behaviour modification to real-world contexts.

Science inquiry skills are further developed in this unit, as is the understanding that psychological knowledge develops over time and in response to ongoing research.

### **Unit content**

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

For named theorists in this unit (Bandura), 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 (Craik and Tulving, 1975; Pavlov, 1902; Watson and Rayner, 1920; Thorndike, 1898; Skinner, 1948; Bandura, Ross and Ross, 1961), 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 post-graduate publications. Age-appropriate sources and teacher instruction ensure that the key information listed for studies is provided.

#### Psychological knowledge and understanding

#### Memory

- sensation and perception
  - processes of sensation reception, transduction, transmission
  - processes of perception selection, organisation and interpretation
- the role of attention in memory
  - selective and divided attention as seen in the Cocktail party effect (Cherry, 1953)
- models for explaining memory
  - processes of memory encoding, storage, retrieval
  - features of the multi-store model of memory (Atkinson and Shiffrin, 1968)
    - o sensory register: duration, capacity, encoding
    - o short term memory: duration, capacity, encoding
    - long-term memory: duration, capacity, encoding
      - procedural, declarative semantic and episodic memory
    - features of the working memory model (Baddeley and Hitch, 1974; Baddeley, 2000)
       central executive, phonological loop, visuospatial sketchpad, episodic buffer
- memory formation
  - structures of the brain
    - $\circ$   $\;$  the role of the hippocampus in the formation and storage of memory
      - Henry Molaison case study
    - $\circ$  ~ the role of the cerebellum in the formation and storage of implicit memories
    - the role of the amygdala in the formation of memories
- process of forgetting and remembering
  - forgetting
    - o types of forgetting
      - retrieval failure
      - interference proactive and retroactive
      - motivated forgetting
      - decay theory
  - remembering
    - o the role of recall (free, serial and cued), recognition and re-learning in memory
    - o levels of processing model of memory (Craik and Lockhart, 1972)
      - shallow (structural, phonemic) and deep (semantic, elaboration) processing
      - study: Depth of processing and the retention of words in episodic memory (Craik and Tulving, 1975)
  - rehearsal as a strategy to improve memory
    - o maintenance rehearsal
    - elaborative rehearsal
    - role of repetition as seen in Ebbinghaus and the forgetting curve (1885)
  - causes of memory loss and impacts on behaviour and emotion
    - o trauma Chronic Traumatic Encephalopathy (CTE)
    - degeneration Alzheimer's disease
    - drug induced Wernicke-Korsakoff Syndrome (WKS)

#### Learning

- theories of learning
  - classical conditioning
    - neutral stimulus, unconditioned stimulus, unconditioned response, conditioned stimulus, conditioned response
    - $\circ$  stimulus generalisation, discrimination, extinction and spontaneous recovery
    - study: Pavlov's dogs (Pavlov, 1902)
    - o study: 'Little Albert' experiment (Watson and Rayner, 1920)
  - operant conditioning
    - three phase model antecedent, behaviour, consequence
    - $\circ$  reinforcement
      - role of reinforcers positive and negative
    - o punishment
      - role of punishers positive and negative
    - $\circ$  schedules of reinforcement fixed, variable, interval and ratio
    - study: Law of effect (Thorndike, 1898)
    - o study: Skinner box (Skinner, 1948)
  - social learning theory Bandura (1977)
    - process of observational learning attention, retention, reproduction, motivation, reinforcement
    - modelling vicarious reinforcement
    - o study: 'Bobo doll' experiment (Bandura, Ross and Ross, 1961)
    - application and evaluation of learning theories in behaviour modification
    - o systematic desensitisation as a treatment for phobias
    - o token economies

#### **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
- develop a research question based on the aim/s
- identify variables (independent, dependent, control, extraneous)
- construct/formulate a hypothesis 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) and non-experimental
  - observational
  - case studies
  - correlational
  - longitudinal
  - cross-sectional
- selection of participants
  - identification of sample and population
    - o methods to sample participants application, method, strengths and limitations
    - o convenience sampling
    - $\circ$  snowballing
    - o random sampling
    - stratified sampling
- allocation of participants application, method, strengths and limitations
  - random allocation
- variables
  - independent
  - dependent
  - control
  - extraneous participant, environment, researcher
  - confounding
- sources and effects of extraneous variables and confounding variables
  - experimenter effect
  - demand characteristics
- minimise the effects of extraneous and confounding variables
  - random allocation of participants
  - single-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
    - $\circ$  open-ended survey
  - quantitative
    - objective physiological measures heart rate, breathing rate, galvanic skin response (GSR)
    - subjective measures checklists and 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, bar, 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 research question

#### **Evaluation of research**

- application and use of the concept of validity as a measure of evaluating research
- application and use of the concept of reliability as a measure of evaluating research
- 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 4 – Psychology motivation, wellbeing and health

## **Unit description**

A key concern in psychology is developing the understanding of human cognition, emotion and behaviour to inform improvements in the wellbeing of individuals and groups in society. In this unit, students develop a psychological understanding of the relationship between motivation and wellbeing, and apply this to the development of effective strategies related to stress and sleep.

This unit uses analysis of theories and models associated with motivation and wellbeing to establish psychological understandings of these concepts. It introduces some elements of the relationships between stress, sleep and wellbeing. Students learn psychological models and techniques to improve wellbeing in these contexts.

The unit emphasises the role and relevance of Science inquiry, where the psychological research is applied to contemporary concerns.

### **Unit content**

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

For named theorists (Deci and Ryan, Maslow) in this unit, students should demonstrate an understanding of:

- the specific 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 (He et al., 2020), 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 post-graduate publications. Age-appropriate sources and teacher instruction ensure that the key information listed for studies is provided.

#### Psychological knowledge and understanding

#### Motivation and wellbeing

- sources of motivation physiological, cognitions, emotions, social
- self-determination theory Deci and Ryan (1985)
  - amotivation, extrinsic and intrinsic motivation
  - psychological needs for motivation autonomy, competence, relatedness
- hierarchy of needs Maslow (1954, 1970)
  - levels of motivation based on deficiency and growth needs (1954)
    - o deficiency needs physiological, safety, love and belongingness, esteem
    - o growth needs self-actualisation
  - expanded hierarchy of needs (1970) cognitive, aesthetic and transcendence needs
  - concept of self-actualisation
    - o characteristics of a self-actualised person
- models of wellbeing
  - subjective wellbeing model of subjective wellbeing Diener (1984)
    - o key components life satisfaction, affective balance
  - psychological wellbeing six factor model of wellbeing Ryff (1989)
    - autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, self-acceptance

#### Applications of psychology to health

- stress as defined by Selye (1936)
  - types of stress distress and eustress (Selye, 1983)
- stressors
  - types of stressors environmental, psychological, social, cultural
  - characteristics of stressors nature, duration, strength
- models of stress
  - stress as a response General Adaptation Syndrome (GAS) model (Selye, 1936, 1983)
    - physiological response to stress heart rate, breathing rate
    - o stages alarm, resistance, exhaustion
  - stress as a stimulus
    - application of the Social Readjustment Scale (Holmes and Rahe, 1967) to assess the impact of stressors on individual health and wellbeing
  - stress as a transaction Transactional Theory of Stress and Coping (Lazarus and Folkman, 1984)
    - interaction between individual and environment
    - role of cognitive appraisal primary and secondary appraisal
    - $\circ$  methods of coping problem-focused, emotion-focused
- health related consequences of stress maladaptive and adaptive coping strategies
- purpose of sleep evolutionary and restorative

- sleep-wake cycle
  - four stages of non-rapid eye movement (NREM) and rapid eye movement (REM)
    - o characteristics sleep state, heart rate, eye movement, muscle tension
    - length and repetition of the sleep cycle
- sleep deprivation
  - causes of sleep deprivation shift work, drugs, sleep environment, stressors
  - psychological and physiological effects of partial and chronic sleep deprivation
    - o partial sleep deprivation mood, attention, reflex speed, vision
    - o chronic sleep deprivation heart disease, obesity, insomnia, anxiety
- techniques to improve sleep hygiene management of electronic devices, consistent sleep patterns, creation of a healthy sleep environment
  - study: Effect of restricting bedtime mobile phone use on sleep, arousal, mood and working memory (He et al., 2020)

#### **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
- develop a research question based on the aim/s
- identify variables (independent, dependent, control, extraneous)
- construct/formulate a hypothesis 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) and 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
    - o convenience sampling
    - $\circ$  snowballing
    - $\circ \quad \text{random sampling} \quad$
    - $\circ \quad \text{stratified sampling} \quad$
- allocation of participants application, method, strengths and limitations
  - random allocation
- variables
  - independent
  - dependent
  - control
  - extraneous participant, environment, researcher
  - confounding
- sources and effects of extraneous variables and confounding variables
  - experimenter effect
  - demand characteristics
- minimise the effects of extraneous and confounding variables
  - random allocation of participants
  - single-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
    - o interviews focus group and individual; structured, semi-structured
    - o open-ended survey
  - quantitative
    - o objective physiological measures heart rate, breathing rate, galvanic skin response (GSR)
    - o subjective measures checklists and 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, bar, 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 relevance to the research question

#### **Evaluation of research**

- application and use of the concept of validity as a measure of evaluating research
- application and use of the concept of reliability as a measure of evaluating research
- 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 12 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 unitss
- 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 12

Type of assessment	Weighting	
<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.		
<ul> <li>Practical Students collect qualitative and/or quantitative data using experimental and/or non- experimental research designs; process, analyse, evaluate and communicate findings.</li> </ul>	20%	
<ul> <li>Research         Referring to existing contemporary or seminal studies, students analyse         psychological evidence in response to an inquiry question and/or hypothesis. They         evaluate the evidence and explain its findings relevant to psychological knowledge         and understandings.     </li> </ul>		
Response		
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.	40%	
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.		
<b>Examination</b> Typically conducted at the end of each semester and/or unit. The examination should reflect the examination design brief included in the ATAR Year 12 syllabus for this course.	40%	

Teachers must use the assessment table to develop an assessment outline for the pair of units. 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
Α	Excellent achievement
В	High achievement
С	Satisfactory achievement
D	Limited achievement
E	Very low achievement

The grade descriptions for the Psychology ATAR Year 12 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 <u>www.scsa.wa.edu.au</u>.

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).

# **ATAR course examination**

All students enrolled in the Psychology ATAR Year 12 course are required to sit the ATAR course examination. The examination is based on a representative sampling of Psychological knowledge and understanding and Science inquiry content for Unit 3 and Unit 4. Details of the ATAR course examination are prescribed in the examination design brief.

Refer to the WACE Manual for further information.

### **Examination design brief – Year 12**

#### **Time allowed**

Reading time before commencing work:	ten minutes
Working time for paper:	three hours

#### Permissible items

Standard items: pens (blue/black preferred), pencils (including coloured), sharpener, correction fluid/tape, eraser, ruler, highlighters

Special items: up to three calculators, which do not have the capacity to create or store programs or text, are permitted in this ATAR course examination

Section	Supporting information
Section One Short answer 70% of the total examination 5–8 short answer questions Suggested working time: 120 minutes	<ul> <li>This section contains questions from Units 3 and Unit 4 content including both the Psychological knowledge and understanding and Science inquiry strands.</li> <li>A minimum weighting of 20% for each strand is allocated in this section.</li> <li>Each question has sub-parts that generally increase in complexity.</li> <li>Questions can require candidates to refer to stimulus materials which can include: text, diagrams, images, tables and/or graphs, second-hand data and/or recent research findings.</li> </ul>
Section Two Extended answer 30% of the total examination Suggested working time: 60 minutes Part A (10%) One compulsory question Part B (20%) One question from a choice of two	This section contains questions that draw on one or more content areas of the syllabus. Questions require the candidate to write a structured answer to demonstrate their understanding of Psychological knowledge and understanding and Science inquiry from Units 3 and 4 content. Questions can require the candidate to refer to stimulus material that can include: text, diagrams, images, second-hand data and/or recent research findings. The candidate's responses can include clearly labelled diagrams with explanatory notes; lists of points with linking sentences; clearly labelled tables and graphs; and/or annotated flow diagrams with supporting notes.

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# **Appendix 1 – Grade descriptions Year 12\***

#### Psychological knowledge and understanding

Accurately evaluates and explains, in detail, a variety of psychological theories, studies, models and concepts.

Accurately evaluates and explains, in detail, relevant psychological theories, studies, models and concepts applied to a variety of familiar and unfamiliar contexts.

#### Science inquiry

Α

B

Accurately evaluates, with detailed explanation, the application of relevant ethical guidelines in a variety of familiar and unfamiliar contexts.

Accurately evaluates relevant research designs, methods for selecting and allocating participants, and methods for minimising the effects of extraneous and confounding variables in familiar and unfamiliar contexts.

Accurately organises data into a variety of clearly presented and appropriate forms.

Accurately evaluates, with detailed explanation, data from a variety of sources, linked to evidence-based conclusions, consistent with evidence and relevant to the research question.

Accurately evaluates, with detailed explanation, relevant strengths and limitations of research, from a variety of scientific sources, and suggests relevant improvements.

#### Communication

Accurately uses a variety of appropriate psychological terminology relevant to theories, studies, models and concepts fluently and in a clear and logical way.

#### Psychological knowledge and understanding

Accurately analyses and explains, in detail, a variety of psychological theories, studies, models and concepts.

Accurately analyses and explains, in detail, relevant psychological theories, studies, models and concepts applied to a variety of familiar and unfamiliar contexts.

#### Science inquiry

Accurately analyses, with detailed explanation, the application of relevant ethical guidelines, in a variety of familiar and unfamiliar contexts.

Accurately analyses relevant research designs, methods for selecting and allocating participants, and methods for minimising the effects of extraneous and confounding variables in familiar and unfamiliar contexts.

Accurately organises data into clearly presented and appropriate forms.

Accurately analyses, with detailed explanation, data from a variety of sources, linked to evidence-based conclusions, consistent with evidence and relevant to the research question.

Accurately analyses, with detailed explanation, relevant strengths and limitations of research, from a variety of scientific sources, and suggests relevant improvements.

#### Communication

Accurately uses a variety of appropriate psychological terminology relevant to theories, studies, models and concepts in a clear and logical way.

	<b>Psychological knowledge and understanding</b> Accurately describes and explains a variety of psychological theories, studies, models and concepts.
	Accurately describes and explains relevant psychological theories, studies, models and concepts applied to a variety of familiar and some unfamiliar contexts.
	Science inquiry Accurately describes and explains the application of relevant ethical guidelines, in familiar and some unfamiliar contexts.
С	Accurately describes and explains relevant 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.
	Organises data into appropriate forms that may lack clarity.
	Accurately describes data from a variety of sources, referring to some evidence relevant to the research question.
	Accurately describes relevant strengths and limitations of research, from a variety of scientific sources, and suggests improvements.
	<b>Communication</b> Accurately uses a variety of everyday language relevant to theories, studies, models and concepts in a clear way.
	Psychological knowledge and understandingDescribes some psychological theories, studies, models and concepts.
	Identifies that relevant psychological theories, studies, models and concepts can be applied to familiar contexts.
D	Science inquiry Describes relevant ethical guidelines in familiar contexts.
	Describes relevant research designs, methods for selecting and allocating participants, and methods for minimising the effects of extraneous and confounding variables in familiar contexts.
	Attempts to organise data.
	Describes data from a variety of sources.
	Describes strengths and limitations of research and suggests improvements.
	<b>Communication</b> Uses everyday language with limited relevance to theories, studies, models and concepts.
E	Does not meet the requirements of a D grade and/or has completed insufficient assessment tasks to be assigned a higher grade.

\* These grade descriptions will be reviewed at the end of the second year of implementation of this syllabus.

