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Psychology

Subject Outline | Stage 1

subject outline changes

Below are the current changes to the subject outline. Teachers are encouraged to explore the changes in detail and make relevant adjustments to their teaching, learning, and assessment programs.

|  |  |  |
| --- | --- | --- |
| From 2024 | To 2025 onwards | page |
| Stage 1 | | |
| Evidence of Learning – 20-credit  Six to eight assessments   * two investigations with a focus on science as a human endeavour * two to four skills and applications tasks | Evidence of Learning – 20-credit  Six **or** **seven** assessments   * **at least one** investigation with a focus on science as a human endeavour * **at least two** skills and applications tasks | [30](#page30), [31](#page31), [34](#page34) |
| Assessment Type 1: Investigations Folio   * Evidence of deconstruction . . . to a maximum of three sides of an A4 page. | Assessment Type 1: Investigations Folio   * Evidence of deconstruction . . . to a maximum of three sides of an A4 page **(minimum font size 10).** | [32](#page32) |
| Performance standards — Investigation, Analysis and Evaluation (IAE1) — A to C grade bands. | Inclusion of ‘justification’ to the IAE1 A to C grade bands:   * A grade band — Critically deconstructs a problem and designs a logical and coherent psychological investigation **with detailed justification.** * B grade band — Logically deconstructs a problem and designs a well-considered and clear psychological investigation **with reasonable justification.** * C grade band — Deconstructs a problem and designs a considered and generally clear psychological investigation **with some justification.** | [36](#page36) |

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Introduction

Subject description

Psychology is a 10-credit subject or a 20-credit subject at Stage 1, and a 20-credit subject at Stage 2.

Since most of the dominant paradigms in psychology in the last hundred years have been scientific ones, this subject emphasises the construction of psychology as a scientific enterprise. Psychology is based on evidence gathered as a result of planned investigations following the principles of scientific inquiry. By emphasising evidence-based procedures including observation, experimentation, and experience, this subject allows students to develop useful skills in analytical and critical thinking and in making inferences.

The skills learnt through Psychology are parallel to those learnt in other science subjects: how to be a critical consumer of information; how to identify psychological processes at work in everyday experiences; how to apply knowledge to real-world situations; how to investigate psychological issues; and how to be an effective communicator.

Psychology aims to describe and explain both the universality of human experience and individual and cultural diversity. It also addresses the ways in which behaviour can be changed. It offers a means for making society more cohesive and equitable; that is, psychology offers ways of intervening to advance the wellbeing of individuals, groups, and societies. However, every change also holds the possibility of harm. The ethics of research and intervention are therefore an integral part of psychology.

An inquiry approach to psychology enables students to define the scope of their learning by identifying investigable questions, deconstructing and designing their research using scientific approaches, using data, and analysing and critiquing their findings. The issues that arise during investigations should be informed by the application of key scientific ideas, skills, concepts, and understanding.

Capabilities

The capabilities connect student learning within and across subjects in a range of contexts.

The SACE identifies seven capabilities. They are:

* literacy
* numeracy
* information and communication technology (ICT) capability
* critical and creative thinking
* personal and social capability
* ethical understanding
* intercultural understanding.

Literacy

In this subject students extend and apply their literacy capability by, for example:

* interpreting the work of scientists across disciplines, using psychological knowledge
* extracting psychological information presented in a variety of modes
* using a range of communication formats to express ideas logically and fluently, incorporating the terminology and conventions of psychology
* synthesising evidence-based arguments
* communicating appropriately for specific purposes and audiences.

Numeracy

In this subject students extend and apply their numeracy capability by, for example:

* solving problems using calculation and critical thinking skills
* obtaining, collating, representing, and analysing data
* accessing and interpreting quantitative and qualitative data
* identifying and interpreting trends and relationships
* manipulating data, using appropriate scientific conventions.

Information and communication technology (ICT) capability

In this subject students extend and apply their ICT capability by, for example:

* locating and accessing credible information
* obtaining, analysing, and representing data electronically
* using technology in psychology safely and ethically
* communicating psychological ideas, processes, and information
* understanding the impact of ICT on the development of psychology and its application in society
* evaluating the application of ICT to advance understanding and innovations in psychology.

Critical and creative thinking

In this subject students extend and apply their critical and creative thinking capability by, for example:

* analysing and interpreting problems from different perspectives
* interpreting and evaluating data and procedures to develop logical conclusions
* analysing interpretations and claims, for validity and reliability
* devising plausible solutions and making reasonable predictions
* envisaging consequences and speculating on possible outcomes
* recognising the significance of creative thinking on the development of psychological knowledge and applications.

Personal and social capability

In this subject students extend and apply their personal and social capability by, for example:

* understanding the importance of psychological knowledge on health and wellbeing, both personally and globally
* making decisions and taking initiative while working independently and collaboratively
* sharing and discussing ideas about psychological issues, developments, and innovations, while respecting the perspectives of others
* recognising the role of their own beliefs and attitudes in gauging the impact of psychology in society
* seeking, valuing, and acting on feedback.

Ethical understanding

In this subject students extend and apply their ethical understanding capability by, for example:

* considering the implications of investigations on human and animal behaviour
* making ethical decisions based on an understanding of psychological principles
* using data and reporting the outcomes of investigations accurately and fairly
* understanding the ethical limitations of different psychological research and interventions
* recognising the importance of their responsible participation in social, political, economic, and legal decision-making.

Intercultural understanding

In this subject students extend and apply their intercultural understanding capability by, for example:

* understanding that the progress of psychology influences and is influenced by cultural factors
* recognising the significant contributions to psychology from diverse cultures
* developing an awareness of the potential biases of psychological practices
* respecting and engaging with different cultural views and customs and exploring their interaction with scientific research and practices
* recognising and understanding different cultural perspectives in the application of psychology.

Aboriginal and Torres Strait Islander knowledge, cultures, and perspectives

In partnership with Aboriginal and Torres Strait Islander communities, and schools and school sectors, the SACE Board of South Australia supports the development of high‑quality learning and assessment design that respects the diverse knowledge, cultures, and perspectives of Indigenous Australians.

The SACE Board encourages teachers to include Aboriginal and Torres Strait Islander knowledge and perspectives in the design, delivery, and assessment of teaching and learning programs by:

* providing opportunities in SACE subjects for students to learn about Aboriginal and Torres Strait Islander histories, cultures, and contemporary experiences
* recognising and respecting the significant contribution of Aboriginal and Torres Strait Islander peoples to Australian society
* drawing students’ attention to the value of Aboriginal and Torres Strait Islander knowledge and perspectives from the past and the present
* promoting the use of culturally appropriate protocols when engaging with and learning from Aboriginal and Torres Strait Islander peoples and communities.

Learning scope and requirements

Learning requirements

The learning requirements summarise the knowledge, skills, and understanding that students are expected to develop and demonstrate through their learning in Stage 1 Psychology.

In this subject, students are expected to:

1. develop and apply knowledge and understanding of psychological concepts in diverse contexts

2. apply science inquiry skills to deconstruct a problem and design and conduct psychological investigations, using appropriate procedures and safe, ethical working practices

3. obtain, record, represent, analyse, and interpret the results of psychological investigations

4. evaluate ethical and unethical practices, procedures, and results, and analyse evidence to formulate and justify conclusions

5. explore and understand psychological science as a human endeavour

6. communicate knowledge and understanding of psychological concepts, using appropriate terms, conventions, and representations.

Content

Psychology is a 10‑credit subject or a 20‑credit subject at Stage 1.

The topics in Stage 1 Psychology provide the framework for developing integrated programs of learning through which students extend their knowledge, skills, and understanding of the three strands of science.

The three strands of science to be integrated throughout student learning are:

* science inquiry skills
* science as a human endeavour
* science understanding.

The topics for Stage 1 Psychology are:

* Topic 1: Cognitive Psychology
* Topic 2: Neuropsychology
* Topic 3: Lifespan Psychology
* Topic 4: Emotion
* Topic 5: Psychological Wellbeing
* Topic 6: Psychology in Context
* Topic 7: Negotiated Topic.

For a 10-credit subject, students study a selection of science understandings from at least two topics.

For a 20-credit subject, students study a selection of science understandings from at least four topics.

The topics selected can be sequenced and structured to suit individual groups of students. Topics can be studied in their entirety or in part, considering student interests and preparation for pathways into future study.

Note that the topics are not necessarily designed to be of equivalent length — it is anticipated that teachers may allocate more time to some than others.

The following pages describe in more detail:

* science inquiry skills
* science as a human endeavour
* the topics for science understanding.

The descriptions of the science inquiry skills and Topics 1 to 5 are structured in two columns: the left-hand column sets out the science inquiry skills or science understanding and the right-hand column sets out possible teaching considerations.

Together with science as a human endeavour, the science inquiry skills and science understanding form the basis of teaching, learning, and assessment in this subject.

The possible teaching considerations are suggestions for potential approaches and are neither comprehensive nor exclusive. Teachers may select from these and are encouraged to consider other approaches according to local needs and interests.

Within the topic descriptions, the following symbols are used in the possible teaching considerations to show how a strand of science can be integrated:

|  |  |
| --- | --- |
| three wheels cog symbol | indicates a possible teaching and learning strategy for science understanding |
| question mark symbol | indicates a possible science inquiry activity |
| human body symbol | indicates a possible focus on science as a human endeavour. |

Science Inquiry Skills

In Psychology, inquiry is an integral part of the learning and understanding of concepts. Activities could involve a range of both individual and collaborative inquiry, during which students extend their skills through engagement with the possible teaching considerations described in the table that follows.

Students develop a better understanding of psychological concepts through research, design, and application. Relevant data are obtained, and students represent and analyse these data. They apply their knowledge and understanding to present and justify conclusions appropriate to the initial question or hypothesis and may propose further research. Students may use the process of deconstructing a problem and designing an investigation to enhance their understanding.

Science inquiry skills are fundamental to students investigating the social, ethical, and environmental impacts and influences of the development of scientific understanding and the applications, possibilities, and limitations of science. These skills enable students to critically consider the evidence they obtain so that they can present and justify conclusions.

| Science Inquiry Skills | Possible teaching considerations |
| --- | --- |
| Psychology uses a biopsychosocial approach to frame an understanding of behaviour — that is, behaviour is analysed and described in terms of biological, psychological, and sociocultural factors.   * Explain how biological, psychological, and social factors could determine the cause and expression of certain psychological phenomena. * Explain how biological, psychological, and sociocultural factors could influence solutions to problematic psychological phenomena. | Demonstrate analytical skills by, for example:   * describing and explaining psychological phenomena from different perspectives; for example, describe the phenomenon of memory loss or learning from a biological, psychological, and social perspective * demonstrating awareness of multifactorial causes of some psychological phenomena; for example, show awareness of the impacts of biopsychosocial factors on the phenomenon of learning * describing how the biopsychosocial approach could be used to develop improved cultural understanding. |
| Investigations in Psychology can be experimental, observational, or qualitative.  In experimental investigations, the investigator examines behaviour by manipulating the independent variable.  In observational investigations, the investigator collects data in a natural setting by means of behavioural observations or self-report methods.  Qualitative investigations may use focus groups and/or the Delphi technique to generate data.   * Identify an investigation as experimental, observational, or qualitative. * Discuss advantages and disadvantages of each type of investigation.   Many investigations involve the collaborative efforts of a team.   * Negotiate the role of each member with the other members of a team. | Demonstrate analytical skills by, for example:   * selecting appropriate investigation designs for different purposes * identifying the independent and dependent variables in experimental investigations * identifying the possible relationships between variables in observational investigations * comparing focus groups and the Delphi technique as a means of generating qualitative data. |
| Scientific methods enable systematic investigation to obtain measurable evidence.   * Deconstruct a problem to determine and justify the most appropriate method for investigation. * Design investigations, including: * a hypothesis or inquiry question * types of variables * dependent * independent * constant * extraneous * the method to be followed * justification of the method * the type and amount of data to be collected * identification of ethical considerations and how these may be addressed * identification of sociocultural considerations and how these may be addressed. * Using information from a range of sources, critically evaluate and appropriately acknowledge those sources. | Demonstrate inquiry skills by, for example:   * designing investigations that require investigable questions and plausible solutions (without implementation) * investigating: * correlational studies * cross-sectional studies * repeated measures studies (longitudinal or sequential) * critiquing proposed investigations * using the conclusion of one investigation to propose subsequent investigations * improving an existing method. |
| The researcher interprets raw data that may be objective or subjective, quantitative or qualitative.   * Identify some advantages and disadvantages of using these types of data.   Results of investigations are presented in a well-organised way to allow them to be readily interpreted.   * Present results of investigations in appropriate ways, such as: * construction of appropriately labelled tables * drawing of appropriately labelled graphs. | Demonstrate inquiry skills by, for example:   * constructing tables to tabulate data, including column and row labels with units * identifying the appropriate representations to graph different data sets * identifying data from different sources (e.g. self-reports, physiological measures, behavioural counts) as objective or subjective, and as quantitative or qualitative * using content analysis to organise qualitative data into themes. |
| Analysis of the results of investigations allows them to be interpreted in a meaningful way.   * Analyse data, including: * identification and discussion of trends, patterns, and correlations * the appropriate use of descriptive statistics (means, medians, standard deviations) * calculation of means and medians for quantitative data sets. | Demonstrate analytical skills by, for example:   * analysing and interpreting data trends, patterns and correlations * determining means and medians for quantitative data sets * determining relationships between variables * determining statistical significance when comparing differences between groups * interpreting standard deviations. |
| Critical evaluation of procedures and data can determine the meaningfulness of the results.   * Identify sources of uncertainty, including confounding and extraneous variables. * Evaluate the reliability and validity of data. * Discuss how the following could affect the data obtained in an investigation: * sample size * representativeness of sample. | Demonstrate inquiry skills by, for example:   * investigating within-subjects and between-subjects measures * distinguishing between internal and external validity * minimising the effect of extraneous variables by appropriate test design * making specific and meaningful recommendations for subsequent investigations. |
| Conclusions can be formed that relate to the hypothesis or inquiry question.   * Select and use evidence and scientific understanding to make and justify conclusions. * Explain the limitations of conclusions. * Explain why the results of some investigations may not lead to definitive conclusions. | Demonstrate inquiry skills by, for example:   * evaluating procedures and then commenting on the limitations of possible conclusions * using data sets to discuss the limitations of the data in relation to the range of possible conclusions that could be made * assessing sample biases * discussing the relevance of the findings beyond a particular study. |
| Ethical practice is an integral aspect of psychology.   * Discuss how the following have or have not been demonstrated in research or treatment: * respect for the dignity and wellbeing of individuals * informing individuals of the nature and purpose of the research/treatment and of any physical or psychological effects that may be expected * obtaining voluntary consent from individuals or from their parents or legal guardians * protecting any personal information acquired * using data only for the purpose for which consent has been obtained * respecting the privacy of personal information that is disclosed * respecting the right of individuals not to participate in or to withdraw from research/treatment at any time without explanation and without reprisal * informing individuals of the results and conclusions of the research. * Work ethically with others, taking into consideration their physical, cultural, and emotional safety. | Demonstrate inquiry skills by, for example:   * identifying specific ethical issues that arise in designing an investigation and how they might be addressed * identifying specific ethical issues that may have been breached in the conduct of an investigation * demonstrating an awareness of potential bias (gender, cultural, or other) in research questions and methods * providing examples of data collection that may cause physical discomfort * describing participants’ rights and the researcher’s responsibilities * describing the researcher’s responsibility to ensure that research designs show consideration to the protection of the rights of children in psychological research * understanding the rights of different cultural groups to feel safe and included, and to have a voice in society * considering the difficulties associated with obtaining data from people within different sociocultural backgrounds, people with different languages, and the very young and the very old. |
| Effective scientific communication is clear, concise, and credible.   * Communicate to specific audiences and for specific purposes using: * appropriate language * correct terminology * conventions, including appropriate acknowledgement of sources of information * cultural deftness. | Demonstrate inquiry skills by, for example:   * describing the conventions used in scientific articles * demonstrating skills in appropriate referencing and footnoting * distinguishing between reference lists and bibliographies * practising scientific communication in a range of written, oral, and multimodal formats (e.g. presenting a PowerPoint or a podcast, or writing a blog) * showing consideration that some cultural groups may communicate in different ways, such as storytelling, art, dance, and music; for example, communication through storytelling or yarning in Aboriginal cultures. |

human body symbol Science as a Human Endeavour

The science as a human endeavour strand highlights science as a way of knowing and doing, and explores the purpose, use, and influence of science in society.

By exploring science as a human endeavour, students develop and apply their understanding of the complex ways in which science interacts with society, and investigate the dynamic nature of psychology. They explore how psychologists develop new understanding and insights and produce innovative solutions to everyday and complex problems and challenges in local, national, and global contexts. In this way, students are encouraged to think scientifically and make connections between the work of others and their own learning. This enables them to explore their own solutions to current and future problems and challenges.

Students understand that the development of psychological concepts, models, and theories is a dynamic process that involves analysis of evidence and sometimes produces ambiguity and uncertainty. They consider how and why psychological concepts, models, and theories are continually reviewed and reassessed as new evidence is obtained, and as emerging technologies enable new avenues of investigation. They understand that society is continually changing, and that scientific advancement involves a diverse range of individual scientists and teams of scientists working within an increasingly global community of practice.

Students explore how scientific progress and discoveries are influenced by a wide range of sociocultural, economic, and ethical factors. They investigate ways in which the application of science may provide great benefits to individuals, the community, and the environment, but may also pose risks and have unexpected outcomes. They understand how decision-making about socio-scientific issues often involves consideration of multiple lines of evidence and a range of needs and values. As critical thinkers, they appreciate science as an ever-evolving body of knowledge that frequently informs public debate but is not always able to provide definitive answers.

The key concepts of science as a human endeavour underpin the contexts, approaches, and activities in this subject, and must be integrated into all teaching and learning programs.

The key concepts of science as a human endeavour, with elaborations that are neither comprehensive nor exclusive, in the study of Psychology are:

Communication and Collaboration

* Science is a global enterprise that relies on clear communication, international conventions, and review and verification of results.
* Collaboration between psychologists and stakeholders advances research and understanding. It requires shared evidence from many sources in a multidisciplinary approach.

Development and Application

* Developments in research and technology lead to advances in psychological understanding.
* The application of psychological understanding can enable scientists to develop solutions, design actions, and evaluate and respond to economic, sociocultural, and environmental factors.

Influence

* Psychological knowledge and its application are both influenced by, and influence economic, sociocultural, religious, ideological, political, and environmental perspectives in a local, national, and global context.
* The use of psychological knowledge may have positive, negative, or unexpected consequences that require monitoring, assessment, and evaluation. The use of psychological knowledge must take into account risks and ethical considerations.

Topic 1: Cognitive Psychology

Cognition refers to mental processes involved in acquiring, storing, retrieving, and using knowledge. We spend almost every waking minute engaged in cognition: attending to some things rather than others and planning what to do next; solving everyday problems; retrieving words and information from our memories; and framing ways to make ourselves understood by others. Each of these is a complex process, yet we often seem to do them effortlessly and simultaneously. How is this possible?

Cognition includes internal processes and representations (e.g. attention, thinking, and memory) and language. These cognitive processes work together to determine how we make sense of the information we receive and how effective we are in the world. This topic focuses on memory. Memory refers to the retention of learning and experience. Remembering is an active process and is influenced by other psychological processes.

| Science Understanding | Possible teaching considerations |  |
| --- | --- | --- |
| Memory is the ability to take in information, store it, and recall it later.   * Discuss how memory is different from learning. * Explain the importance of encoding, storing, and retrieving in memory formation. | What would life be like without memory?   * Find out about Henry Molaison (HM), whose memory was affected after surgery. * Watch a clip of Clive Wearing, who is unable to form any new memories. | three cogs symbol |
| In the modal model of memory, memory consists of three stores: a sensory register, short-term memory (STM), and long-term memory (LTM).   * Describe how each store has its own characteristics in terms of capacity and duration. * Describe the differences between procedural, episodic, and semantic memory. | Investigate:   * the magic number 7 * primacy and recency effects.   Discuss the strengths and weaknesses of using experimental designs in investigating memory.  Discuss the strengths and weaknesses of using objective and quantitative data when investigating memory.  Research and discuss the effects of music on memory. |  |
| Evaluate the modal model of memory for strengths and weaknesses. | three cogs symbol |
| Information remembered with conscious effort uses explicit memory, while information remembered unconsciously and effortlessly uses implicit memory.   * Determine whether procedural, episodic, and semantic memories are explicit or implicit. | Demonstrate how implicit and explicit memory work.  Type the following sentence without looking down at your hands: ‘Every red tomato is delicious.’ Now, try naming the ten letters that appear in the top row of letters on your keyboard without looking at the keyboard. | three cogs symbol |
| The levels of processing model considers the depth of processing involved in memory.   * Explain how shallow processing differs from deep processing. * Compare the effectiveness of shallow processing with deep processing in promoting retention. | Discuss applications of the levels of processing model, which include:   * reworking (putting information in your own words or talking about it with someone else) * method of loci (trying to remember a list of items, linking each with a familiar place or route) * imagery (creating an image of something you want to remember, e.g. a mind map) * clustering and conceptual hierarchies.   Use one of these techniques to summarise your knowledge of the modal model of memory. | three cogs symbol |
| Forgetting information from short-term memory (STM) can be explained.   * Use the theory of displacement to explain the forgetting of information from STM. | Discuss how the serial position effect may be used as evidence for the displacement theory of forgetting.  Investigate Ebbinghaus’ forgetting curve. | three cogs symbol |
| Forgetting information from long-term memory (LTM) can be explained in a number of ways.   * Explain the difference between proactive and retroactive interference. * Use the theory of retrieval failure to explain forgetting from LTM. * Use the decay theory to explain the forgetting of information from LTM. * Explain forgetting from LTM using the lack of consolidation theory. | Explore Baddeley’s 1975 experiment on context cues. | three cogs symbol |
| Compare and contrast the works of Reijmers et al. (2007) and Duncan (1949) on consolidation theory.  Should these types of experiments be conducted? Are there alternative ways of finding out information about memory formation?  Explore selective attention and optical illusions. |  |
| There are also biological explanations for forgetting.   * Describe how memory problems in people with Alzheimer’s disease change over time. * Explain the memory problems in people with Alzheimer’s disease. | Explore the effects on memory of:   * brain trauma * psychological trauma, including stress * drugs * bilingualism. | three cogs symbol |
| Investigate the following questions using online scientific journals such as *New Scientist:*   * Are there gender differences in memory? * Are there differences in memory as we age? | three cogs symbol |
| Research has shown that culture helps shape memory.   * Describe examples of how culture influences what is remembered and how it is learned. * Explain why observational designs or focus groups may have been used to obtain data about cultural differences in memory retention. * Describe the advantages and disadvantages of observational designs and focus groups in researching how culture influences memory retention. | In many cultures, oral traditions help to pass on specific cultural practices and values, language, laws, and histories.  Investigate how oral traditions, requiring good memory, are passed on. Examples include yarning in Aboriginal and Torres Strait Islander peoples and wayang kulit in Javanese culture.  Investigate how memory is used differently in different contexts, for example:   * card playing * chess playing * wayang dalang. |  |
| Strategies can be used to enhance memory.   * Describe how mnemonic strategies could be used to improve memory. * Explain how the following affect memory: * massed versus distributed practice * over-learning * context dependence. * Describe how the level of processing (shallow vs deep) affects memory. * Describe how the following techniques are being used to improve memory: * implanted electrodes in the brain * transcranial magnetic stimulation. * Discuss the advantages and disadvantages of these technological manipulations. | Investigate ways to minimise interference.  Explore memory activities at:   * <http://www.exploratorium.edu/memory/dont_forget/playing_games.html> * <http://faculty.washington.edu/chudler/chmemory.html>   Find out about some techniques for enhancing memory, including remembering information for exams at: [www.mindtools.com/memory.html](http://www.mindtools.com/memory.html)  Investigate techniques for increasing effectiveness of study skills. | three cogs symbol |
| Discuss the statement: ‘Technology is both a problem and an aid when it comes to memory.’  Memory-boosting brain implants are in the works. Would you get one?  Do natural memory boosters such as ginkgo biloba work? What are the benefits and risks? |  |
| Social issues sometimes arise from faulty memories.   * Explain how inaccurate eyewitness testimony can lead to false convictions. Factors to be considered include: * leading questions * schema * selective attention * confirmation bias * similarity factors.   The accuracy of eyewitness testimony could be addressed in a number of ways.   * Explain the value of the person conducting a line-up or photospread being ‘blind’ to which member of the line-up or photospread is the suspect. * Explain why the suspect should not stand out in the line-up or photospread. * Describe how cognitive interviews are used, and explain their value. | Discuss how reconstructive processes influence memory (e.g. the memory chain activity ‘War of the Ghosts’).  Investigate Chase and Simon’s 1973 research into the relationship between expertise, schema, and encoding. | three cogs symbol |
| Explore the recovered memory controversy. Are recovered memories reliable enough to be the sole basis for legal decisions? |  |
| Investigate how the accuracy of eyewitness testimony can be improved. Details of a task that explores eyewitness testimony can be found at:  <http://www.faculty.washington.edu/chudler/chmemory.html> | three cogs symbol |
| Discuss the use of confidence statements by eyewitnesses when making their decisions about line-ups, photospreads, perceptions, and/or stereotyping.  What role does stereotyping have in cognitive interviews? What are the advantages and disadvantages of this stereotyping? | three cogs symbol |

Topic 2: Neuropsychology

The brain and nervous system are the centrepiece for the scientific endeavour of psychology. The physical structures of our central nervous system affect the ways that we both perceive and respond to the variety of stimuli that we encounter in the world. Our environment can significantly affect the development and functioning of our central nervous system, in both positive and negative ways.

The study of the central nervous system includes the structure and function of the different types of cells that make up the central nervous system; the relationship between the brain, its structures, our behaviour, and perceptions; and the role of hormones and neurotransmitters in shaping cognition, emotion, and behaviour. The study of this topic also focuses on the effects that environmental factors, such as exposure to traumatic events, overstimulation, and technology, can have on the functioning and development of the central nervous system, as well as the application of various interventions.

| Science Understanding | Possible teaching considerations |  |
| --- | --- | --- |
| Psychological and behavioural responses begin with stimulation to the nervous system.   * Discuss the different branches and roles of the nervous system (central, peripheral, somatic, autonomic, sympathetic, and parasympathetic). | What happens when one of the branches of the nervous system is compromised?   * Discuss different disorders or illnesses that affect aspects of the nervous system (such as Parkinson’s disease). * Discuss how the symptomology of major depressive disorder can affect different aspects of the nervous system. * Compare the stress response as it is experienced by humans with what is experienced by other animals. | three cogs symbol |
| The nervous system is comprised of specialised cells.   * Discuss different types of neurons (motor, sensory, and interneurons) and their roles in contributing to psychological responses. | Describe the structure and function of the parts of the neuron, including dendrites, axon, myelin sheath, and synapse. |  |
| The brain, as part of the central nervous system, consists of numerous structures that contribute to psychological and behavioural responses in a variety of ways.   * Discuss the different lobes (frontal, temporal, parietal, occipital) and their functions. * Discuss specialised structures (such as the prefrontal cortex, hippocampus, amygdala) and their functions. | What happens when parts of the brain are damaged or fail to function as expected?   * Investigate Phineas Gage. * Investigate examples discussed by neurologists, such as Oliver Sacks writing in *The man who mistook his wife for a hat.* | three cogs symbol |
| How can behaviour change or affect the brain?   * Investigate the relationship between addiction and the nucleus accumbens. * Discuss how technology (such as social media) can affect the brain. * Watch http://www.youtube.com/watch?v=HffWFd\_6bJ0 |  |
|  | * Discuss how exercise, diet, and hydration can affect the brain. * Watch https://www.youtube.com/watch?v=BHY0FxzoKZE   How can trauma or poverty potentially affect the brain?  Investigate how intergenerational trauma affects the brain, and the impact of this on behaviours.  Explore research on ‘healing the past by nurturing the future’ at:  <https://wealli.com.au/>  What happens to the brains of people suffering with post-traumatic stress disorder (PTSD)?  Dissect a sheep’s brain to identify various parts of the brain, e.g. brain stem, white matter, grey matter. |  |
| The nervous system uses various chemicals that contribute to our responses and behaviours.   * Discuss the purpose of neurotransmitters and hormones, such as serotonin, dopamine, oxytocin, cortisol. | What chemicals contribute to ‘normal’ and ‘abnormal’ experiences?   * Discuss how deficiencies in serotonin and oxytocin could contribute to mental illness. * Discuss how the absence or presence of certain biochemicals can contribute to the expression of symptoms of mental illness. | three cogs symbol |
| Can technology (such as video games or social media) be used to manipulate the brain to produce these chemicals and then further affect our behaviour?  Discuss the importance of dopamine in reward-based learning.  Read <https://www.nytimes.com/2019/01/30/health/facebook-psychology-health.html> |  |
| Mental illnesses (such as depression and anxiety) may have a biological basis and can, in some cases, benefit from biologically based treatments and management techniques. | Investigate how the brain of an individual with major depressive disorder looks and functions when compared to the brain of an individual who has not experienced depression.   * Explain how changes in the structure and function of the prefrontal cortex and amygdala can result in common symptomology. * Discuss how difficulties with production of neurotransmitters and hormones can result in common symptomology. |  |
| Investigate common and experimental biological treatments for illnesses. | three cogs symbol |
| * Optogenetics is an experimental treatment for both major depressive disorder and Parkinson’s disease. * What are the ethical concerns with using or developing this experimental treatment? * How does this new treatment use modern technology to address the biochemical and physiological differences in the brain? |  |
| Conducting research in neuropsychology can be ethically challenging and can also result in a variety of outcomes that may be ethically or morally ambiguous. | Discuss why conducting research in this area can be difficult but beneficial.  Investigate the methods used, and findings of, recent research into neuroplasticity and the ethical issues surrounding this research. |  |
| Investigate:   * different ways that research in neuropsychology could be ethically problematic * the research that video game developers would need to be familiar with to encourage people to continue playing games * some of the targeted advertising stemming from research in this area. | three cogs symbol |

Topic 3: Lifespan Psychology

Lifespan psychology encompasses development from conception to death, and the associated health, social, and behavioural changes which occur throughout the process. Lifespan psychology can be studied scientifically across three developmental domains: physical, cognitive, and psychosocial. By studying these developmental changes and the ways in which individuals adapt to life changes, lifespan psychology can attempt to understand and explain why we behave, think, and feel in certain ways. For humans, knowledge gained through the study of lifespan psychology can in turn improve our self-understanding and interactions with others, and also influence wider society, through application in the education, disability, legal, and political systems.

| Science Understanding | Possible teaching considerations |  |
| --- | --- | --- |
| Lifespan psychology is the scientific study of the full process of human development from conception to death. It is a holistic approach to understanding all the physiological, cognitive, emotional, and social changes that people go through.  There are developmental stages across the human lifespan from birth to late adulthood. | Explore the areas of human development throughout the human lifespan:   * biological development, including changes in the body, brain, and nervous system * social development, including relationships with other people and group development * cognitive development, including changes in mental abilities such as memory and language * emotional development, including changes in the experience and subsequent expression of feelings. | three cogs symbol |
| Development is biologically determined over the human lifespan, but can be influenced by the environment. | Investigate the differences between nature and nurture, or the interaction between the two, in the changes that occur across the lifespan. |  |
| There are individual differences in the development of humans over their lifespans. | Discuss how development changes over the human lifespan, including the differences between understandings of continuous and discontinuous development. | three cogs symbol |
| There are different theories of lifespan development in psychology, often including components of the biopsychosocial model. | Investigate established theories of developmental psychology:   * Piaget’s theory of cognitive development * Erikson’s theory of psychosocial development * Vygotsky’s sociocultural theory, and the zone of proximal development. | three cogs symbol |
| Investigate Gelman’s research on the impact of psychological essentialism on early categorisation of the world around us. |  |

|  |  |  |
| --- | --- | --- |
| The different theories of development can be applied to different individuals at different times.  The development of social behaviour is influenced by different family structures, whether they involve:   * individual attachments * extended family structures * multiple attachments, such as in Aboriginal or other cultural groups. | Critique one of the theories above in its application to a specific context. | three cogs symbol |
| Investigate:   * the development of social behaviour and attachment (Bowlby) * how early experiences can influence the development of social behaviour * the use of developmental theories in educational contexts, such as Montessori and Steiner/Waldorf. |  |
| Lifespan psychology may be studied using qualitative, quantitative, cross-sectional, and longitudinal designs, which vary in validity.  Describe ethical considerations in the study of lifespan psychology, and in the application of the findings. | In cross-sectional studies, researchers select and compare groups of different ages over a short period of time. Investigate:   * Lucas and Donnellan’s research on age differences in personality * the role of experience in concept development. |  |
| Cross-sectional studies often include twin and adoption studies.  Longitudinal studies follow the same group of people over an extended period, observing changes in behaviour that occur at different ages. | Investigate adoption studies such as the *Colorado Adoption Project*.  Discuss the findings of the *Growing up in Australia: Longitudinal Study of Australian Children (LSAC)*, which follows 10 000 children and families. |  |
| Watch *Three Identical Strangers* (film) and discuss the findings and subsequent ethical considerations. |  |
| There are many theories of development. As the research underlying these theories has been mostly conducted in Western countries, the theories are not necessarily transferrable to other non-Western cultures. | Discuss whether changes in development are the result of nature or nurture, or an overlap of the two. | three cogs symbol |
| Knowledge of development throughout the lifespan in a range of cultures strengthens the understanding of how we develop as humans. | Investigate how researching development throughout the lifespan in non-human primates could inform human lifespan psychology.  Consider Super and Harkness’ ‘developmental niche’ as a framework for examining the cultural structuring of child development. |  |
| Ethnocentric theories of development are not appropriate to the experiences of all individuals, such as migrants or those of multicultural backgrounds. | Explore how current theories of lifespan psychology in a globalised world consider cultural variations in human development across a lifespan. | three cogs symbol |
| The online nature of some social interaction in contemporary society has impacts on the development of children and adolescents. These impacts can be either positive or negative. | What impact can social media have on the development of individuals’ ideals, personality, goals, impression management, political views, and spending habits?  Discuss the impact of online technology on:   * digital skills * literacy skills.   Discuss the positive and negative societal impacts of 24-hour news and fake news.  Explore models which show the connection between social development and the positive and negative impacts of social connectedness online.  Consider how the socially rewarding nature of online technology may inhibit other skills from developing, such as motor and verbal communication skills. | three cogs symbol |
| Discuss how online technology has enhanced the exchange of meanings and the development of other skills such as spoken and written language. |  |
| Discuss how cyberbullying may affect the cognitive development of children and adolescents.  Explore Gelman’s research on digital privacy for children. More information available at: <https://sites.lsa.umich.edu/gelman-lab/> |  |
| Advances in technology and social media affect developmental changes in children and adolescents. | Discuss how new technologies can be used to target specific skill development, such as recognition of facial emotions and verbal cues. |  |
| Online technology is used for the improvement of motor skills, memory, and other skills. Technology is also used to maintain knowledge and skills in older people, such as those with dementia. | Research has shown that the average attention span has decreased in the past 20 years.  Investigate the Pomodoro Technique and how this has been affected by technology. | three cogs symbol |
| Investigate the use of technology for the improvement of motor skills, memory, and other skills, particularly for older people. |  |

Topic 4: Emotion

As we move through our daily lives, we experience a variety of different emotions. Emotions fuel our behaviour and determine what we pay attention to; they affect how we learn and what we remember. Emotions regulate our relationships, binding us to some people and repelling us from others. While there are several different theories about how an individual experiences an emotion, one common belief is that all emotions are subjective experiences that are made up of the same three components: physiological responses, subjective feelings, and expressive behaviour. Although some emotions are universally recognised, the environment — in particular, culture — can influence an individual’s experience and understanding of an emotional experience. Similarly, different people can experience completely different emotions from other individuals in exactly the same situation. Psychological disorders can result when emotions cannot be regulated.

| Science Understanding | Possible teaching considerations |  |
| --- | --- | --- |
| While there are different theories about how emotion is experienced, psychologists believe that emotions are subjective experiences that are made up of the same three components:   * physiological responses * subjective feelings * expressive behaviour. | Analyse a character from a specific scene in a film who is experiencing an extreme emotion. Identify and discuss:   * what physiological responses their body may be experiencing at this time | three cogs symbol |
| * what subjective experiences they may be experiencing at this time and what past experiences could have led to this reaction * the expressive behaviour of the individual to communicate this emotion to those around them. |  |
| Explore and compare theories of emotion, such as:   * James–Lange theory * Cannon–Bard theory * Schachter–Singer two-factor theory * Lazarus’ cognitive-mediational theory * Plutchik’s wheel of emotions theory. |  |
| The main structures of the limbic system (hypothalamus, thalamus, amygdala, and hippocampus) each play an important role in emotional processing.  Some basic emotions are universally recognised and understood; however, others differ based on cultural context.  Culture can affect the way in which people display and interpret emotion. Despite different emotional display rules, our ability to recognise and produce most facial expressions of basic emotions appears to be universal. | Explore what happens when different parts of the limbic system become injured. How does this affect an individual’s emotional experience? | three cogs symbol |
| Research the following areas:   * the manipulation of emotions in advertising and fake news * how technology (e.g. online chatrooms, Facebook, Instagram) is affecting people’s understanding of emotion * psychological interventions for emotional issues (e.g. anger-management programs, grief counselling, managing depression) |  |
|  | * the physical act of displaying emotion is universal but the meaning associated with these ‘expressions’ may be culturally influenced. |  |
| Psychological principles concerning emotion are evident in everyday experiences and events. | Explore some of the social issues caused by problems with emotional regulation, such as:   * road rage * drug taking.   Investigate how technology can be an emotion-regulating device.  Investigate how social networks can affect emotions, both positively and negatively.  Research the effectiveness of Facebook on reducing binge drinking behaviour, e.g. see: <https://onlinelibrary.wiley.com/doi/full/10.1111/dar.12141> | three cogs symbol |
| Emotional disorders occur when individuals have difficulty regulating their emotions and it becomes a problem that is a danger to themselves or other people. | Investigate the causes, symptoms, and treatments of some of the following disorders:   * depressive disorders: bipolar disorder, depression and other mood disorders * anxiety disorders: panic disorder, obsessive-compulsive disorder (OCD), phobias * conduct disorders: attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), autism spectrum disorder (ASD). It is important to note that the expressions of these three disorders are different for each individual.   Explore how cultural biases and different understandings of mental health presentations could affect the treatment of people from different cultures, e.g. for Aboriginal people at: <https://indigenouspsychservices.com.au/wp-content/uploads/2019/06/JUSTWAYS-revision-3.pdf>  or <https://indigenouspsychservices.com.au/about/ips-tracy-westerman/> | three cogs symbol |
| Experimental, observational, and qualitative designs may be used to study emotion.  Methods of assessing psychological responses may be subjective or objective, quantitative or qualitative.  People with emotional disorders are vulnerable. There are additional ethical and cultural issues associated with research and applications in the area of emotion. | Discuss why different researchers could use different:   * research designs in investigating emotion * methods of assessing psychological responses in their research on emotion. * Individuals experiencing an extreme emotion may be classified as ‘vulnerable’. * Describe the ethical responsibilities that a researcher would have to assume when using these individuals in research. |  |

Topic 5: Psychological Wellbeing

Psychological wellbeing focuses on understanding and building on human strengths to complement the traditional approach of psychology, which has had an emphasis on healing damage. Psychological Wellbeing is the scientific study of human flourishing, and an applied approach to optimal functioning. It is the study of the strengths and virtues that enable individuals, communities, and organisations to thrive, and is grounded in the belief that people want to lead meaningful and fulfilling lives, to cultivate what is best within them, and to enhance their own personal experiences and the experiences of others.

| Science Understanding | Possible teaching considerations |  |
| --- | --- | --- |
| Mental health includes our emotional, psychological, and social wellbeing. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices.   * Explain the differences between mental health and mental illness. | Explore some cultural and historical differences in concepts of mental health and mental illness. | three cogs symbol |
| Mental health can be analysed and described in terms of biological, psychological, and sociocultural factors.   * Describe the biopsychosocial dimensions of wellbeing. * Describe the biopsychosocial dimensions of resilience. | Explore how optimism underpins health from a biopsychosocial perspective.  The term ‘flourishing’ is a descriptor of positive mental health. Explore:   * the different factors that influence flourishing in different countries and cultures around the world. * the three routes to happiness: * the pleasant life * the good life * the meaningful life * the broaden-and-build theory of positive emotion * the PERMA (positive emotion, engagement, relationships, meaning, accomplishment) wellbeing theory. | three cogs symbol |
| An important factor in human flourishing is maintaining close relationships with others. | Investigate how relationships could be affected by:   * assertiveness training * the four styles of responding to others: * active constructive * passive constructive * active destructive * passive destructive. |  |
| The VIA Inventory of Strengths (VIA‑IS) is a measure designed to identify an individual’s character strengths. The inventory was created by Peterson and Seligman to operationalise their handbook, *Character strengths and virtues* (CSV).   * Compare and contrast the CSV with the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) used in traditional psychology. * Describe how the VIA‑IS could be used. * Investigate the reliability and validity of the VIA‑IS. * Describe some of the criticisms of the VIA‑IS. | Complete the VIA character strengths survey at <https://www.viacharacter.org/>, and discuss how signature strengths are used to create engagement in daily activities.  Watch a film, or study several celebrities, and analyse their character strengths.  Research how belonging to or serving something bigger than oneself creates meaning in an individual’s life. (This links to self-actualisation covered in Topic 1: Psychology of the Individual in Stage 2 Psychology.)  Explore different behavioural expressions of wellbeing across cultures and the importance of this in cross-cultural understanding. | three cogs symbol |
| Interventions in positive psychology focus on increasing wellbeing.  Describe the following interventions:   * mindfulness * meditation * positive cognitive-behavioural therapy (CBT). | Go to <https://www.therapistaid.com/therapy-worksheet/gratitude-journal-three-good-things>, complete the worksheet, and reflect on how the exercise has affected the way you view your life.  Practise mindfulness activities.  Practise meditation activities.  Explore resilience programs that exist globally and/or locally (e.g. the *Penn Resilience Program)*.  Evaluate an app/website that has been created as a tool for mindfulness. Critique the app/website for quality. What is the aim? What positive psychology principles does it use? How successful do you think it is? | three cogs symbol |

Topic 6: Psychology in Context

The discipline of psychology is very broad, covering numerous areas. Distinct fields have emerged within psychology in order to study behaviour in specific contexts. In each of these fields, researcher practise psychology from a different perspective, and for a specific purpose, while drawing on many aspects from other areas of psychology.

Topic 6: Psychology in Context allows students to study one of these fields. The six contexts offered in Stage 1 Psychology are relevant examples of the many ways of studying psychology in context.

Teachers select one of the following contexts in which to study psychology:

1. Indigenous Psychology

2. Organisational Psychology

3. Cyberpsychology

4. Environmental Psychology

5. Forensic Psychology

6. Exercise and Sports Psychology.

In developing a topic from a context, teachers must address the three strands of science that are integrated throughout student learning in Stage 1 Psychology:

* science inquiry skills
* science as a human endeavour
* science understanding.

If a student studies Topic 6: Psychology in Context as part of Stage 1 Psychology, no more than one of the contexts above can be studied within the 10-credit subject or the 20-credit subject.

Topic 7: Negotiated Topic

Students may be given the opportunity to negotiate a topic with their teacher. The negotiated topic could involve expanding an existing topic or introducing a new area of study. The negotiated topic should avoid repeating science understandings studied in other topics.

In developing a negotiated topic, teachers must address the three strands of science that are integrated throughout student learning in Stage 1 Psychology:

* science inquiry skills
* science as a human endeavour
* science understanding.

Assessment scope and requirements

Assessment at Stage 1 is school based.

Evidence of learning

The following assessment types enable students to demonstrate their learning in Stage 1 Psychology:

* Assessment Type 1: Investigations Folio
* Assessment Type 2: Skills and Applications Tasks.

For a 10-credit subject, students should provide evidence of their learning through three or four assessments. Each assessment type should have a weighting of at least 20%. Students undertake:

* one psychological investigation
* one investigation with a focus on science as a human endeavour
* one or two skills and applications tasks.

For a 20-credit subject, students should provide evidence of their learning through six or seven assessments. Each assessment type should have a weighting of at least 20%. Students undertake:

* two psychological investigations
* at least one investigation with a focus on science as a human endeavour
* at least two skills and applications tasks.

For both the 10-credit and 20-credit subjects, at least one assessment should involve collaborative work.

Assessment design criteria

The assessment design criteria are based on the learning requirements and are used by teachers to:

* clarify for the student what they need to learn
* design opportunities for students to provide evidence of their learning at the highest possible level of achievement.

The assessment design criteria consist of specific features that:

* students should demonstrate in their learning
* teachers look for as evidence that students have met the learning requirements.

For this subject the assessment design criteria are:

* investigation, analysis, and evaluation
* knowledge and application.

The specific features of these criteria are described below.

The set of assessments, as a whole, must give students opportunities to demonstrate each of the specific features by the completion of study of the subject.

Investigation, Analysis, and Evaluation

The specific features are as follows:

IAE1 Deconstruction of a problem and design of a psychological investigation.

IAE2 Obtaining, recording, and representation of data.

IAE3 Analysis and interpretation of data and other evidence to formulate and justify conclusions.

IAE4 Evaluation of procedures and their effect on data.

Knowledge and Application

The specific features are as follows:

KA1 Demonstration of knowledge and understanding of psychological concepts.

KA2 Application of psychological concepts in diverse contexts.

KA3 Exploration and understanding of the interaction between science and society.

KA4 Communication of knowledge and understanding of psychological concepts and information, using appropriate terms, conventions, and representations.

School assessment

Assessment Type 1: Investigations Folio

For a 10-credit subject, students undertake:

* one psychological investigation, which must include deconstruction of a problem and design of a psychological investigation
* one investigation with a focus on science as a human endeavour.

For a 20-credit subject, students undertake:

* two psychological investigations, of which one must include deconstruction of a problem and design of a psychological investigation
* at least one investigation with a focus on science as a human endeavour.

Psychological Investigation

Students investigate psychological concepts and relationships through analysis of data. Data can be obtained via an approved investigation or analysis of an approved data set.

For analysis of data obtained via an approved investigation, data can be collected using one of the following:

* a SACE Board research program for Stage 1 Psychology
* an investigation provided by the teacher
* an investigation approved by the teacher.

For analysis of a data set, suitable sources of data include:

* <https://data.gov.au>
* <https://www.lsay.edu.au/data>

To ensure the wellbeing of both the student researchers and their participants, students are not permitted to conduct any investigations without prior approval from their teacher and/or their schools.

Investigations and sourced data sets should be directly related to one or more of the topics being studied in Stage 1 Psychology. All data should be appropriately referenced.

Through investigations, students demonstrate their science inquiry skills by:

* deconstructing a problem to determine the most appropriate method for investigation
* formulating investigable questions and hypotheses
* selecting and using appropriate equipment and techniques (where required)
* identifying variables
* collecting, representing, analysing, and interpreting data
* evaluating procedures and considering their impact on results
* drawing conclusions, with justification
* communicating knowledge and understanding of concepts
* discussion of relevant ethical considerations.

An investigation:

* enables students to investigate a question or hypothesis linked to one of the topics in Stage 1 Psychology
* may provide the opportunity for a range of both individual and collaborative activities.

The investigation should enable students to individually deconstruct a problem, for which the outcome is uncertain, and design their own method and justify their plan of action.

Evidence should outline the deconstruction process, the method designed as most appropriate, and a justification of the plan of action. This should be presented on a maximum of three sides of an A4 page (minimum font size 10). Suggested formats for this evidence include flow charts, concept maps, tables, or notes. This evidence must be attached to the report.

For each investigation, students present an individual report.

The report may include:

* introduction with relevant psychological concepts, and either a hypothesis and variables, or an investigable question
* the method or process that was implemented
* identification and management of safety and/or ethical risks
* results, including table(s) and/or graph(s)
* analysis of results, including identifying trends and linking results to concepts
* evaluation of procedures and their effect on data, and identifying sources of uncertainty
* a conclusion, with justification.

Suggested formats for presentation of a psychological investigation report include:

* a written report
* an oral presentation
* a multimodal product.

The report should be a maximum of 1000 words if written, or a maximum of 6 minutes for an oral presentation, or the equivalent in multimodal form.

Science as a Human Endeavour (SHE) Investigation

Students individually investigate contemporary examples of how science interacts with society. They focus on one or more of the key concepts of science as a human endeavour (SHE). The context of the investigation should be related to the science understandings being studied in Stage 1 Psychology.

Students access information from different sources, select relevant information, analyse their findings, and explain the connection to science as a human endeavour.

Students should:

* identify the key concepts
* explain the context through relevant science understanding
* expand upon science understanding through the context
* explore the interactivity of the science understanding with one or more of the key concepts of SHE in Psychology: communication and collaboration, development, and influence.

Possible starting points for the investigation could include, for example:

* a media release
* government policy
* trends in big data in psychology
* public debate
* peer-reviewed research and publication
* a discovery in a field of psychological research.

Based on their investigation, students prepare a scientific text, which must include the use of scientific terminology. The scientific text could take the form of, for example:

* a report
* an article
* a blog
* an infographic
* a multimodal presentation.

The scientific text should be a maximum of 1000 words if written, or a maximum of 6 minutes for an oral presentation, or the equivalent in multimodal form.

For this assessment type, students provide evidence of their learning in relation to the following assessment design criteria:

* investigation, analysis, and evaluation
* knowledge and application.

Assessment Type 2: Skills and Applications Tasks

For a 10-credit subject, students undertake one or two skills and applications tasks.

For a 20-credit subject, students undertake at least two skills and applications tasks.

Skills and applications tasks allow students to provide evidence of their learning in tasks that may:

* be applied, analytical, and/or interpretative
* pose problems in new and familiar contexts
* involve individual or collaborative assessments, depending on task design.

A skills and applications task may involve, for example:

* solving problems
* designing an investigation to test a hypothesis or investigable question
* considering different scenarios in which to apply knowledge and understanding
* graphing, tabulating, and/or analysing psychological information
* evaluating procedures and identifying their limitations
* formulating and justifying conclusions
* representing psychological information diagrammatically
* using psychological terms, conventions, and notations.

As a set, skills and applications tasks should be designed to enable students to apply their science inquiry skills, demonstrate knowledge and understanding of key psychological concepts and learning, and explain connections with science as a human endeavour. Problems and scenarios should be set in a relevant context, which may be practical, social, or environmental.

Skills and applications tasks may include, for example:

* modelling or representing concepts
* an academic poster
* developing simulations
* practical and/or graphical skills
* a multimodal product
* an oral presentation
* participation in a debate
* an extended response
* responses to short-answer questions
* a structured interview
* an excursion report
* a response to science in the media.

Where a skills and applications task is undertaken as a supervised assessment, it should be a maximum of 60 minutes of class time, excluding reading time.

Where a skills and applications task is not a supervised assessment, the scientific text should be a maximum of 1000 words if written, or a maximum of 6 minutes for an oral presentation, or the equivalent in multimodal form.

For this assessment type, students provide evidence of their learning in relation to the following assessment design criteria:

* investigation, analysis, and evaluation
* knowledge and application.

Performance standards

The performance standards describe five levels of achievement, A to E.

Each level of achievement describes the knowledge, skills, and understanding that teachers refer to in deciding how well students have demonstrated their learning on the basis of the evidence provided.

During the teaching and learning program the teacher gives students feedback on their learning, with reference to the performance standards.

At the student’s completion of study of a subject, the teacher makes a decision about the quality of the student’s learning by:

* referring to the performance standards
* taking into account the weighting of each assessment type
* assigning a subject grade between A and E.

Performance Standards for Stage 1 Psychology

| - | Investigation, Analysis, and Evaluation | Knowledge and Application |
| --- | --- | --- |
| A | Critically deconstructs a problem and designs a logical and coherent psychological investigation with detailed justification.  Accurately and thoroughly obtains, records, and represents data.  Systematically analyses and interprets data and evidence to formulate logical conclusions with detailed justification.  Critically and logically evaluates procedures and their effect on data. | Demonstrates deep and broad knowledge and understanding of a range of psychological concepts.  Applies psychological concepts highly effectively in diverse contexts.  Critically explores and understands in depth the interaction between science and society.  Communicates knowledge and understanding of psychology coherently, with highly effective use of appropriate terms, conventions, and representations. |
| B | Logically deconstructs a problem and designs a well‑considered and clear psychological investigation with reasonable justification.  Logically obtains, records, and represents data.  Logically analyses and interprets data and evidence to formulate suitable conclusions with reasonable justification.  Logically evaluates procedures and their effect on data. | Demonstrates some depth and breadth of knowledge and understanding of a range of psychological concepts.  Applies psychological concepts mostly effectively in diverse contexts.  Logically explores and understands in some depth the interaction between science and society.  Communicates knowledge and understanding of psychology mostly coherently, with effective use of appropriate terms, conventions, and representations. |
| C | Deconstructs a problem and designs a considered and generally clear psychological investigation with some justification.  Obtains, records, and represents data with some errors.  Undertakes some analysis and interpretation of data and evidence to formulate generally appropriate conclusions with some justification.  Evaluates procedures and some of their effect on data. | Demonstrates knowledge and understanding of a general range of psychological concepts.  Applies psychological concepts generally effectively in diverse contexts.  Explores and understands aspects of the interaction between science and society.  Communicates knowledge and understanding of psychology generally effectively, using some appropriate terms, conventions, and representations. |
| D | Prepares a basic deconstruction of a problem and an outline of a psychological investigation.  Obtains, records, and represents data with occasional accuracy and effectiveness.  Describes data and undertakes some basic interpretation to formulate a basic conclusion.  Attempts to evaluate procedures or suggest an effect on data. | Demonstrates some basic knowledge and partial understanding of psychological concepts.  Applies some psychological concepts.  Partially explores and recognises aspects of the interaction between science and society.  Communicates basic psychological information, using some appropriate terms, conventions, and/or representations. |
| E | Attempts a simple deconstruction of a problem and a procedure for a psychological investigation.  Attempts to record and represent some data.  Attempts to describe results and/or interpret data to formulate a basic conclusion.  Acknowledges that procedures affect data. | Demonstrates limited recognition and awareness of psychological concepts.  Attempts to apply psychological concepts.  Attempts to explore and identify an aspect of the interaction between science and society.  Attempts to communicate information about psychology. |

Assessment integrity

The SACE Assuring Assessment Integrity Policy outlines the principles and processes that teachers and assessors follow to assure the integrity of student assessments. This policy is available on the SACE website (www.sace.sa.edu.au) as part of the SACE Policy Framework.

The SACE Board uses a range of quality assurance processes so that the grades awarded for student achievement in the school assessment are applied consistently and fairly against the performance standards for a subject and are comparable across all schools.

Information and guidelines on quality assurance in assessment at Stage 1 are available on the SACE website (www.sace.sa.edu.au).

Support materials

Subject-specific advice

Online support materials are provided for each subject and updated regularly on the SACE website (www.sace.sa.edu.au). Examples of support materials are sample learning and assessment plans, annotated assessment tasks, annotated student responses, and recommended resource materials.

Advice on ethical study and research

Advice for students and teachers on ethical study and research practices is available in the guidelines on the ethical conduct of research in the SACE on the SACE website (www.sace.sa.edu.au).