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SOUTH AUSTRALIA

Psychology

2021 Subject Outline

Stage 1

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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 the 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 well-being 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
- safe and ethical use of technology in psychology
- 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 well-being, 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
- acknowledging the need to plan for a sustainable future
- understanding the ethical limitations of different psychological research and intervention
- 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 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 skills, knowledge, 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 – for example; Indigenous psychology, cyberpsychology, organisational psychology, environmental psychology, forensic psychology, exercise and sports psychology
- Topic 7: Negotiated topic (this may expand an existing topic or introduce a new area of study)

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

For a 20-credit subject, students study a selection of concepts 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 the topics 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:

indicates a possible teaching and learning strategy for understanding a science inquiry skill

indicates a possible science inquiry activity

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 the skills and possible contexts described in the table that follows.

Students develop a better understanding of some psychological concepts through research, design and application. Relevant data is obtained, and students represent and analyse this data, and justify further research and present and justify conclusions appropriate to the initial question or hypothesis. Students may use the process of deconstructing a problem and designing an investigation as a part of this inquiry process.

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	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 phenomena 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 phenomena of learning. • describe how biopsychosocial factors could work together to create strength-based solutions for Aboriginal individuals, families or communities.

Science inquiry skills	Teaching considerations
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 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 by 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 socio-cultural 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.

Science inquiry skills	Teaching considerations
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 mean and median for quantitative data sets.	Demonstrate analytical skills by, for example: • analysing and interpreting data trends, patterns and correlations, including those in big data • determining means and medians for quantitative data sets • determining relationships between variables • determining statistical significance when comparing differences between groups • interpreting standard deviation
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 and between groups 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.

Science inquiry skills	Teaching considerations
Ethical practice is an integral aspect of psychology. • Discuss how the following have/have not been demonstrated in research or treatment: – respect for the dignity and well-being 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 researcher 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 certain cultural groups including Aboriginal people have to feel culturally safe in various settings • considering the way data is extracted and research conducted for different sociocultural and/or minority groups. For example, mistrust of research related to the Aboriginal people and data.
Effective scientific communication is clear and concise. • Communicate to specific audiences and for specific purposes using: – appropriate language – terminology – conventions including appropriate acknowledgement of sources of information – cultural awareness.	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, podcast or writing a blog) • showing consideration that some cultural groups may communicate in different ways such as storytelling and/or yarning in Aboriginal culture.

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 and shaped by a wide range of social, economic, ethical, and cultural 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 endeavor 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 are exemplified through the accompanying elaborations; however, elaborations are not limited to this scope.

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 progresses research, understanding and enterprise. It requires shared evidence from many sources in a multidisciplinary approach.

Development and Application

- Developments in psychological understanding lead to advancements in research, enterprise and technology

- The application of psychological understanding can enable scientists to develop solutions, progress discoveries, design action, evaluate and respond to economic, social, cultural, and environmental and sustainable factors.

Influence and Impact

- Psychological knowledge and its application is both influenced by, and influences economic, sociocultural, religious, ecological, environmental, sustainable, ideological and political perspectives in a local, national and global context.
- The use of psychological knowledge may impact through beneficial or unexpected consequences requiring monitoring, assessment, and evaluation of risk, through 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, unable to form any new memories.
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 and research the effects of music on memory.
	Discuss the strengths and weaknesses of using objective and quantitative data when investigating memory. Evaluate the modal model of memory for strengths and weaknesses.
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 your keyboard without looking at the keyboard.

Science understanding	Possible teaching considerations
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, i.e., a mind map) • clustering and conceptual hierarchies. Use one of these techniques to summarise your knowledge of the modal model of memory (e.g. impact of music on memory). 
Forgetting information from short-term memory (STM) can be explained. • Use the theory of displacement to explain the forgetting of information from short-term memory. • Use the decay theory to explain the forgetting of information from short-term memory.	Discuss how the serial position effect may be used as evidence for the displacement theory of forgetting. Investigate Ebbinghaus' forgetting curve. 
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 long-term memory. • Explain forgetting from long-term memory using the lack of consolidation theory.	Explore Baddeley's 1975 experiment on context cues.  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 reasons for forgetting. • Describe how memory problems in people with Alzheimer's disease change over time.	Explore the effects of: • brain trauma • psychological trauma, including stress • drugs on memory. 

Science understanding	Possible teaching considerations
• Explain the memory problems in people with Alzheimer's disease.	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?
Culture helps shape memory. • Describe at least two examples of intercultural differences in memory. • Explain why observational designs or focus groups may have been used to obtain data about intercultural differences in memory. • Describe the advantages and disadvantages of both designs related to memory and culture.	In many cultures, including that of Australian Aboriginal people, oral traditions such as storytelling or yarning help to pass on specific cultural practices and values, language, laws, and histories. Explore the mistrust research related to the way research was conducted in the past for Aboriginal people and the impact this has on data collected relating to memory as well as the cultural safety of the people. Investigate how oral traditions, requiring good memory, are passed on.
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.	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: http://www.mindtools.com/memory.html Investigate techniques for increasing effectiveness of study skills at: http://www.mtsu.edu/~studskl/mem.html
• Describe how: – implanted electrodes in the brain and – transcranial magnetic stimulation are being used to improve memory. • Discuss the advantages and disadvantages of these technological manipulations.	Discuss the statement: Technology is both a problem and a solution when it comes to memory. Memory-boosting brain implants are in the works. Would you get one? Do natural memory boosters such as gingko biloba work? What are the benefits and risks?

Science understanding	Possible teaching considerations
Social issues sometimes arise from faulty memories. • Explain how inaccurate eye-witness 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 lineup 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 lineup 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.  Explore the recovered memory controversy: repression or reconstruction? 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://faculty.washington.edu/chudler/chmemory.html  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? 

Topic 2: Neuropsychology

The brain and nervous system are the centerpiece for the scientific endeavor of psychology. The physical structures of our central nervous system affect both the way that we 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 behavior and perceptions, and the role of hormones and neurotransmitters in shaping cognition, emotion, and behavior. 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 behavioral 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. 
The nervous system is comprised of specialized 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, is comprised of numerous structures that contribute to psychological and behavioral responses in a variety of ways.	What happens when parts of the brain are damaged or fail to function as expected? • Investigate Phineas Gage • Investigate examples from neurologists such as Oliver Sacks in 'The Man who Mistook his Wife for a Hat'. 

Science understanding	Possible teaching considerations
• Discuss the different lobes (frontal, temporal, parietal, occipital) and their function (s). • Discuss specialized structures (such as the prefrontal cortex, hippocampus, amygdala, et cetera) and their function(s).	How can behavior change or affect the brain? • Investigate the importance of addiction and the nucleus accumbens. • Discuss how technology (such as social media) can affect the brain. – Watch https://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. Healing the past by nurturing the future research - https://www.latrobe.edu.au/jlc/research/healing-the-past/research https://wealli.com.au/ What happens to the brain of people suffering with PTSD? Conduct a sheep's brain dissection to identify various parts of the brain, brain stem, white and grey matter.
The nervous system utilizes various chemicals that contribute to our responses and behaviors. • Discuss the purpose of neurotransmitters and hormones (such as serotonin, dopamine, oxytocin, cortisol et cetera).	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. 
	Can technology (such as video games or social media) be used to manipulate the brain to produce these chemicals and then further affect our behavior? • Discuss the importance of dopamine in reward-based learning. Read: https://www.nytimes.com/2019/01/30/health/facebook-psychology-health.html 

Science understanding	Possible teaching considerations
Mental illnesses (such as depression and anxiety) 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. • Optogenetics is an experimental treatment for both Major Depressive Disorder and Parkinson's disease. – What are the ethical concerns with using or developing these experimental treatments? – How do these new treatments utilize 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 or explore different ways that research in this area could be ethically problematic. • Video game developers need some understanding of research in this area to encourage people to continue playing games. • Targeted advertising stems from research in this area. 

Topic 3: Lifespan Psychology

Lifespan psychology encompasses the development from conception to death and the associated health, social and behavioral changes which occur throughout the process. Lifespan psychology can be studied scientifically across three developmental domains: physical, cognitive, and psychosocial. By studying these changes and the ways in which humans adapt to life changes, lifespan psychology can attempt to understand and explain why we behave, think and feel in certain ways. This can in turn improve our self-understanding and interactions with others. Knowledge in the area of development over a lifespan can influence wider society, through application in the legal, education, disability, 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: • Physical and 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	
Development is biologically determined with environmental influences over the human life span.	Discuss how development changes over the human life span, including the differences between understandings of continuous and discontinuous development.	
There are individual differences in the development of humans over the life span.	Some understandings focus on the differences between nature versus nurture, or the interaction between the two, in the changes that occur across the life span.	
There are a number of different theories of development throughout the lifespan 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' sociocultural theory, and the zone of proximal development.	
	• Susan Gelman and the impact of psychological essentialism on early categorisation of the world around us.	

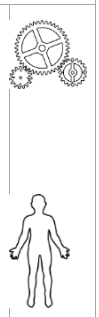
Science understanding	Possible teaching considerations
The application of different theories of lifespan development in society. Explore and compare the development of social behaviour in varied nuclear family structures where there are: • individual attachments • extended family structures • multiple attachments such as in Aboriginal and/or other cultural groups.	Critique of one or more theories in the application to a specific context. The development of social behaviour and attachment (John Bowbly) begins at birth. 
	Early experiences can influence the development of this 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.	Cross-sectional studies select and compare groups of different ages over a short period of time. Consider Richard Lucas and Brent Donnellan's research on age differences in personality. 
	Cross-sectional studies can also include twin and adoption studies. Investigate adoption studies such as the Colorado Adoption Project. Longitudinal studies follow the same group of people over an extended period of time, observing changes in behaviour that occur at different ages. Consider 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, which have resulted from research conducted in western countries, meaning they are not necessarily transferrable to other cultures. Studies are ethnocentric.	Consider whether changes in development are the result of nature or nurture, or an overlap of the two. 
Knowledge of development throughout the lifespan in other 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 Charles Super and Sara Harkness' 'Developmental Niche' as a framework for examining the cultural structuring of child development. 

Science understanding	Possible teaching considerations
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 considers cultural variations in human development across a lifespan. 
The online nature of social interaction in contemporary society has impacts on the development of children and adolescents. These impacts can be either positive or negative.	Social media can be used to communicate effectively and remain connected to others.  What impact can social media have on the development of individuals ideals, personality, goals, impression management, political views, spending habits? Online technology increases digital literacy skills, including access to current information quickly and easily. Discuss the positive and negative societal impact of 24-hour news and fake news. Explore models which show the connection between social development and the positive and negative impact of social connectedness online.
	Consider the socially rewarding nature of online technology may inhibit other skills from developing, such as motor and verbal communication skills. Discuss how online technology has enhanced and changed the development of other skills such as spoken and written language. 
	Cyberbullying is prevalent in online technology, which may impact the cognitive development of children and adolescents. The work of Susan Gelman in digital privacy for children. More information available at: https://sites.lsa.umich.edu/gelman-lab/ 
Advancements in technology and social media impact developmental changes in children and adolescents.	New technologies can be used to target specific skill development, such as recognition of facial emotions and verbal cues. 

Science understanding	Possible teaching considerations
	Research has shown that the average attention span has decreased by four seconds in the past twenty years, whereas the ability to multitask has improved. Investigate the 'pomodoro effect' and how this has been shaped/changed by technology. https://time.com/3858309/attention-spans-goldfish/ Changes in the development of memory have occurred with the ease of access to information in contemporary society. 
	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. 

Topic 4: Emotion

As we move through our daily lives, we experience a variety of different emotions. Emotions fuel our behaviour and prioritise what we pay attention to; impacting how we learn, and what we remember. They regulate our relationships, binding us to some people and repelling us from others. Whilst 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. Whilst some emotions are universally recognised, the environment - in particular culture - can shape and influence an individual's experience and understanding of an emotional experience. Similarly, different people can experience a completely different emotion than another individual in the exact same situation. Psychological disorders can result when emotions become dysregulated. In short, emotions are integral to every aspect of human psychology.

Science understanding	Possible teaching considerations
Whilst there are different theories about how emotion is experienced, psychologists agree 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 – What subjective experiences they may be experiencing at this time and what past experiences could have led to this reaction – The expressive behavior of the individual to communicate this emotion to those around them. 
	• Possible theories to explore and compare: – James-Lange Theory – Cannon-Bard Theory – Schachter-Singer Two Factor Theory – Lazarus' Cognitive Mediational Theory – Plutchick's Wheel of Emotion Theory 
• The 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 impact the way in which people display and interpret emotion. Despite different emotional display rules, our ability to recognize and produce most facial expressions of basic emotions appears to be universal.	• What happens when different parts of the limbic system become injured? How does this impact an individual's emotional experience? • Research the following areas: – the manipulation of emotions in advertising and fake news – How technology is impacting peoples understanding of emotion (i.e. online chatrooms, Facebook, Instagram etc.) – psychological interventions for emotional issues (e.g. anger management programs, grief counselling, managing depression)

Science understanding	Possible teaching considerations	
Psychological principles concerning emotion in everyday experiences and events.	• Social issues of emotion: – road rage – drug taking. Technology can be an emotion-regulating device; it can change a user's mental and emotional state within seconds. It affects how we feel and behave and allows us to better relate to others and achieve our goals. This can be a very positive experience, with some apps available for therapeutic purposes, but can also be quite harmful. Social Networks can positively impact our emotions, but they can also lead to mental health and emotional issues including anxiety, loneliness, and feelings of isolation. A large amount of time spent on social media can negatively impact our personal relationships. *Study on reducing binge drinking behaviour using facebook.* https://onlinelibrary.wiley.com/doi/full/10.1111/dar.12141	
Emotional disorders occur when an individual has difficulty regulating their emotions and it becomes a problem that is a danger to themselves or other people. These types of disorders are both relatively common and very serious. Explore the expression of a range of emotional disorders	• Depressive Disorders: Bipolar Disorder, Depression and other mood disorders • Anxiety Disorders: Panic Disorder, Obsessive Compulsive Disorder, 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 the above disorders are different for each individual. • Cultural biases and understanding different mental health presentations in cultures i.e. for Aboriginal people. https://indigenouspsychservices.com.au/wp-content/uploads/2019/06/JUSTWAYS-revision-3.pdf https://indigenouspsychservices.com.au/about/ips-tracy-westerman/	

Science understanding	Possible teaching considerations
• The investigation designs and methods of assessing psychological responses that are used to study emotion. • Ethical and cultural issues associated with research and applications in the area of emotion.	What is the best way for psychologists to measure emotion? When experiencing an extreme emotion or when working with emotional disorders, the individuals may be classified as a 'vulnerable group'. What duty of care and ethical responsibilities would a researcher have in studying these groups?

Topic 5: Psychological Wellbeing

Psychological wellbeing focusses 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 experience of others.

Science understanding	Possible teaching considerations
• The concepts of mental health and mental illness	• The difference between mental health and mental illness • Cultural and historical differences in concepts of mental health and mental illness.
• The biopsychosocial dimensions of well-being • The biopsychosocial dimensions of resilience	• 'Flourishing'. – Explore the different factors that influence 'flourishing' in different countries/cultures around the world. • The 3 routes to happiness: – The Pleasant Life, The Good Life, The Meaningful Life • Explore the Theory of 'Positive Emotion' and resilience proposed by Broaden and Build. • PERMA (Positive emotion, Engagement, Relationships, Meaning, Accomplishment) wellbeing theory. 
	• Maintaining positive relationships: – Assertiveness training and assertive communication – The 4 styles of responding to others: Active constructive, Passive Constructive, Active Destructive, Passive Destructive 

Science understanding	Possible teaching considerations	
	• 'GRIT' • Explore how optimism and hope underpin health from a bio-psycho-social perspective • Complete the VIA character strengths & virtues, and discuss how signature strengths are used to create engagement in daily activities. • Watch a film, or study several celebrities, and analyse the character strengths of the characters/celebrity. • Research how belonging to or serving something bigger than self creates meaning in an individual's life • Explore different behavioural expressions of well-being across cultures and the importance of this in cross-cultural understanding	
• Psychological interventions	• Complete the 'Three Good Things' exercise and reflect on its impact in your own life • Practice mindfulness activities • Practice meditation activities • Explore resilience programs that exist globally and/or locally (for example the Penn Resilience Program) • Discover 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 utilize? How successful do you think it is?	
• Cyberpsychology interventions	• The Kindness Social Media Project. Paying-it-forward stories posted on a range of social media platforms regarding how others can promote altruistic behaviour that is celebrated by society and the global community.	

Topic 6: 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.

A study of Psychology in context should only be undertaken once per 10-credit subject.

The study of Psychology incorporates a broad range of topics, making it difficult to study the subject as a whole. As such, distinct fields within Psychology have emerged in order to study behavior in specific contexts. Each of these contexts attempts to research and practice Psychology from a different perspective, and for a specific purpose. The six contexts in Stage 1 Psychology attempt to provide a broad overview for students of the possibilities for Psychology in context.

In constructing a topic, *teachers and students should address as many of the following principles* that underlie the existing topics as possible:

- Understanding of the chosen context at a broad level
- Understanding theoretical concepts specific to the chosen context
- Evaluation of research specific to the chosen context
- Science Inquiry Skills, including ethics
- The application of interventions and/or practice in the chosen context
- Intercultural/and or Indigenous perspectives
- Cyberpsychology
- New technology and advancements in the field

Topic 7: Negotiated Topic

Students may be given the opportunity to negotiate an alternative option topic. This could involve expanding an existing option topic or introducing a new area of study. The negotiated topic must include concepts from science inquiry skills and science as a human endeavor.

In constructing a negotiated topic, teachers and students should address as many of the following principles that underlie the existing topics as possible:

- Understanding of the chosen context at a broad level
- Understanding theoretical concepts specific to the chosen context
- New directions in Psychology
- Evaluation of research specific to the chosen context
- Science inquiry skills, including ethics
- The application of interventions and/or practice in the chosen context
- Intercultural and/or Indigenous perspectives
- Cyberpsychology and the new technology impact on behavior.

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
- at least one skills and applications task.

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

- two psychological investigations
- two investigations 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 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 new and familiar 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
- two investigations with a focus on science as a human endeavour.

Students investigate psychological concepts and relationships through analysis of an appropriate data set to identify an area for future research. Students are required to formulate an evidence-based conclusion. The area of interest of investigations will be

directly related to one or more of the topics studied at Stage 1 Psychology. Teachers should provide advice to students about the suitability of the chosen topic, particularly in light of ethical considerations for psychological research. Teachers can choose to use the same data set for the class or allow students to select their own data set. Each data set must be referenced.

Appropriate data sets for analysis include:

- https://data.gov.au/
- https://www.lsay.edu.au/data
- https://www.fya.org.au/our-research/
- data from social media sites.

As a set, practical investigations should enable students to:

- work individually or collaboratively
- investigate a question or hypothesis for which the outcome is uncertain
- investigate a question or hypothesis linked to one of the topics in Stage 1 Psychology
- individually deconstruct a problem to design their own process or method and justify their plan of action.

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
- conclusion, with justification.

Evidence of deconstruction (where applicable) should outline the deconstruction process, the method designed as most appropriate, and a justification of the plan of action, to a maximum of 3 sides of an A4 page. Suggested formats for this evidence include flow charts, concept maps, tables, or notes. This evidence must be attached to the report.

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.

Only the following sections of the report are included in the word count:

- introduction
- analysis of results
- evaluation of procedures used in collection of the data in selected study
- conclusion and justification.

Suggested formats for presentation of a practical investigation report include:

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

Science as a Human Endeavour (SHE) Investigation

Students investigate contemporary examples of how science interacts with society. This may focus on one or more of the key concepts of science as a human endeavor. Contexts may be drawn from science understanding in Psychology or others beyond the immediate content.

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; communication and collaboration, development and application, and impact and influence.

The SHE concepts can be viewed through economic, sociocultural, religious, ecological, environmental, sustainable, ideological and political perspectives in a local, national and global context.

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

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

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

Based on their investigation, students prepare a scientific communication.

The communication 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 primarily 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 at least one skills and applications task.

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 or graphically
- 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
- 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.

For this assessment type, students provide evidence of their learning primarily 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, coherent, and detailed psychological investigation. 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. Highly effectively application of psychological concepts in new and familiar 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. 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. Mostly effective application of psychological concepts in new and familiar 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. 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. Generally effective application of psychological concepts in new or familiar 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 in familiar contexts. 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 in familiar contexts. 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).

Psychology

2022 Subject Outline

Stage 2

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CONTENTS

INTRODUCTION

SUBJECT DESCRIPTION

Psychology is 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 the 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 well-being 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, 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
- safe and ethical use of technology in psychology
- 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 well-being, 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
- acknowledging the need to plan for a sustainable future
- understanding the ethical limitations of different psychological research and intervention
- 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 2 Psychology.

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 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

Stage 2 Psychology is a 20-credit subject.

The topics in Stage 2 Psychology provide the framework for developing integrated programs of learning through which students extend their skills, knowledge, 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 2 Psychology are:

- Topic 1: Psychology of the Individual
- Topic 2: Psychological Health and Wellbeing
- Topic 3: Organisational Psychology
- Topic 4: Social Influence
- Topic 5: The Psychology of Learning

Students study all five topics. The topics can be sequenced in any order and structured to suit individual groups of students.

The following topics are assessed in the external examination:

- Topic 4: Social Influence
- Topic 5: The Psychology of Learning

The following topics are assessed in the school assessment types:

- Topic 1: Psychology of the Individual
- Topic 2: Psychological Health and Wellbeing
- Topic 3: Organisational Psychology
- Topic 4: Social Influence
- Topic 5: The Psychology of Learning

For topics 1, 2 and 3 teachers select science understandings that reflect the interests and skills of the student cohort and integrate these across the learning program.

Teachers may select science understandings from topics 1, 2, and 3, which allows flexibility in student learning through the depth and detail in which each of the three topics is studied.

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 the topics 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:

indicates a possible teaching and learning strategy for understanding a science inquiry skill

indicates a possible science inquiry activity

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 the skills and possible contexts described in the table that follows.

Students develop a better understanding of some psychological concepts through research, design and application. Relevant data is obtained, and students represent and analyse this data, and justify further research and present and justify conclusions appropriate to the initial question or hypothesis. Students may use the process of deconstructing a problem and designing an investigation as a part of this inquiry process.

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	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 phenomena 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 phenomena of learning. • describe how biopsychosocial factors could work together to create strength-based solutions for Aboriginal individuals, families or communities.

Science inquiry skills	Teaching considerations
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 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 by 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 socio-cultural 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.

Science inquiry skills	Teaching considerations
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, I 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) ◆ calculations of mean and median for quantitative data sets.	Demonstrate analytical skills by, for example: • analysing and interpreting data trends, patterns and correlations, including those in big data • determining means and medians for quantitative data sets • determining relationships between variables • determining statistical significance and effect size when comparing differences between groups or relationships between variables • interpreting standard deviation.
Critical evaluation of procedures and data can determine the meaningfulness of the results. • Identify sources of uncertainty, such as 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 and between groups 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.

Science inquiry skills	Teaching considerations
Ethical practice is an integral aspect of psychology. • Discuss how the following have/have not been demonstrated in research or treatment: – respect for the dignity and well-being 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 researcher 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 cultural groups including Aboriginal people have to feel culturally safe in various settings • considering the way data is extracted and research conducted for different sociocultural and/or minority groups. For example, mistrust of research related to the Aboriginal people and data.
Effective scientific communication is clear and concise. • Communicate to specific audiences and for specific purposes using: – appropriate language – terminology – conventions including appropriate acknowledgement of sources of information – cultural awareness.	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, podcast or writing a blog) • showing consideration that some cultural groups may communicate in different ways such as storytelling and/or yarning in Aboriginal culture.

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 and shaped by a wide range of social, economic, ethical, and cultural 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 endeavor 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 are exemplified through the accompanying elaborations; however, elaborations are not limited to this scope.

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 progresses research, understanding and enterprise. It requires shared evidence from many sources in a multidisciplinary approach.

Development and Application

- Developments in psychological understanding lead to advancements in research, enterprise and technology
- The application of psychological understanding can enable scientists to develop solutions, progress discoveries, design action, evaluate and respond to economic, social, cultural, and environmental and sustainable factors.

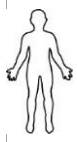
Influence and Impact

- Psychological knowledge and its application is both influenced by, and influences economic, sociocultural, religious, ecological, environmental, sustainable, ideological and political perspectives in a local, national and global context.
- The use of psychological knowledge may impact through beneficial or unexpected consequences requiring monitoring, assessment, and evaluation of risk, through ethical considerations.

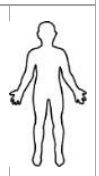
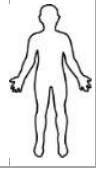
Topic 1: Psychology of the Individual

Although every individual is distinctive, we perceive some people to be more alike than others in the ways in which they engage with their social and physical worlds. These patterns of similarities and differences are the province of personality. Personality refers to the complex network of emotions, cognitive processes, and behaviours that provide coherence and direction to a person's life. The personality we have affects our goals, how we feel, how we act, and how we see ourselves and other people.

The study of personality includes different concepts of personality, personality assessment, and cultural and individual differences in personality.

Science understanding	Possible teaching considerations
Personality is a socially and culturally constructed concept. There are different concepts of personality, including psychodynamic, humanistic and trait. • Describe a psychodynamic approach to personality. • Discuss the strengths and weaknesses of Freud's psychodynamic approach. • Describe a humanistic approach to personality. • Discuss the strengths and weaknesses of the Maslow's humanistic approach. • Describe a trait conception of personality. • Discuss the strengths and weaknesses of the trait approach.	 People often say and do things online that they wouldn't ordinarily say or do face-to-face. This is known as the "disinhibition effect". • Explore: – the causes of this disinhibition effect – the positive and negative effects of online disinhibition. • Explain the relationship between the disinhibition effect and personality differences. • View studies by Dr John Suler and Dr Melanie Nguyen, Sydney University https://www.liebertpub.com/doi/abs/10.1089/1094931041291295 https://www.researchgate.net/publication/51750501_Comparing_Online_and_Offline_Self-Disclosure_A_Systematic_Review
	 Compare Freud's contributions to the psychodynamic approach with one or more Carl Jung, Alfred Adler and Erik Erikson to the psychodynamic perspective of personality. Describe how Karen Horney's theory of mental health differed from Freud's, and suggest why she and Freud held such different views about women. Freud proposed three elements of personality—the ID, the ego, and the superego. Discuss the roles of these elements in the disinhibition effect.

Science understanding	Possible teaching considerations
	Compare and contrast Carl Rogers' person-centred theory with Abraham Maslow's self-actualisation theory. According to Rogers, the ideal self is the person you would like to be; the real self is the person you actually are. Is the disinhibition effect more likely to reveal the "real self" than face-to-face contact? Discuss. According to Jung, we assume a *persona* in public, a social face we present to the world. How could an individual's online persona differ from that in the real world?
	Evaluate Hans Eysenck's trait theory and the "Big Five" personality factors. The Five-Factor Model (FFM), also known as the Big Five model has been used to examine similarities and differences in traits between cultures. Discuss: • the similarities in trait expression that exist in different cultures • the differences in trait expression that seem to exist in different cultures • why the FFM model is considered to be deficient in some cross-cultural research.
Various forms of personality assessment are used today. They include standardised self-report inventories, behavioural observations and clinical interviews. • Describe some ways in which personality assessments are used. • Discuss the advantages and disadvantages of using personality assessments for different purposes. • Discuss the advantages and disadvantages of standardised self-report inventories, behavioural observations and clinical interviews. • Explain the difference between validity and reliability when analysing the effectiveness of a personality assessment.	Try the Ulla Zang online personality test, then discuss the following questions: • How well did the description fit your personality? • Are there any problems with the description? • Can a choice of picture reveal personality? • Why would this test have less validity than a standardised self-report inventory? • What do you think is needed for a good personality test? Explore some of the following standardised self-report inventories: • Myers-Briggs Type Indicator • Minnesota Multiphasic Personality Inventory (MMPI-2)

Science understanding	Possible teaching considerations
• Describe two ethical issues which must be taken into account when giving someone a personality assessment.	• The Sixteen Personality Factor (16PF) Questionnaire • The Neuroticism Extraversion Openness Personality Inventory (NEO-PI-R). • The appropriateness of the HEXACO model (honesty-humility (H), emotionality (E), extraversion (X), agreeableness (A), conscientiousness (C), and Openness to Experience (O)) in cross-cultural research into personality. 
The ways of measuring personality are linked to particular beliefs about its structure. • Describe how the psychodynamic, humanistic and trait proponents of personality would differ in their selection and use of personality assessments.	Discuss their similarities and their differences. 
Psychological principles concerning personality are evident in everyday experiences. • Describe how an understanding of the similarities and differences between people could promote personal growth in an individual. • Describe how assertiveness training could be used to: – promote personal growth – improve social relationships. Personality disorders can be conceptualised as exaggerations of personality traits to dysfunctional levels. • Suggest how a biopsychosocial model could be used to understand the development of a personality disorder. There is often a stigma associated with personality disorders, e.g. borderline personality disorder. Discuss: • the stereotypical ways in which people with mental health issues are viewed • the role of media in promoting these stereotypes • the effects of this stigma on the individual • ways of reducing or removing this stigma.	Describe: • how the study preferences of students with different personalities could differ • how schools could cater to these differences.  Personality is influenced by society and culture, but Hollywood films tend to present personalities who are clear and distinct types that never change. Choose one literary, media or film character, and describe his/her personality in terms of two psychological conceptions of personality.  It is estimated that about 10% of the world's population suffers from some form of personality disorder. For any one personality disorder, describe: • the disorder • the diagnostic process, and possible problems with diagnosing • the possible treatments • the prognosis.
Various investigation designs could be used to study personality. • Describe how a researcher could conduct: – an experimental design to investigate personality; that is, one	There is evidence showing that people who prefer certain styles of music tend to have specific personality traits. Design an experiment to test this. 

Science understanding	Possible teaching considerations
in which an independent variable is manipulated and the changes in the dependent variable are observed. – a non-experimental design to investigate personality, either by observation of selected participants, or by being an explicit part of the investigation, interpreting observations using language that is descriptive rather than quantitative. • Discuss some of the ethical issues associated with research in the area of personality.	How could you demonstrate that there is a correlation between personality characteristics and driving behaviour?  Consider how personality and environment work together to influence behaviour; personal control; internal/external locus on control Compare: • the advantages of a focus group with those of the Delphi technique • focus group ethical considerations with those of the Delphi technique.

Topic 2: Psychological Health and Wellbeing

People with healthy minds are not just free of mental disorders: they also have high levels of social and emotional well-being. This topic examines the positive and negative factors that affect psychological health, how people can be helped to cope with mental health issues and stress, and what they can do to increase their emotional and social well-being.

Science understanding	Possible teaching considerations
Mental health may be affected by a number of factors. • Explain what is meant by the term 'mental health'. • Discuss how mental health could be affected positively and negatively by: – biological factors – sociocultural factors.	Design an experimental investigation that would test the effect on mental health of exercise, sleep, diet, alcohol, or other drugs.  Discuss some ethical issues associated with experimental research in the area of mental health. Consider negative sociocultural factors such as poor working environments (e.g. noise, heavy workload, harassment), unemployment, lack of education, poverty, cultural prejudice (e.g. in TV series and films) and social isolation. Consider positive sociocultural factors such as good working environments, education, friendships and leisure activities • Design a non-experimental investigation to determine the relationship between a positive and a negative factor and mental health. • Suggest how employment conditions, education and the media (e.g. TV series and films) could improve mental health. • Give some examples of positive and negative media influences on the depiction of mental health. • Discuss how ethical issues differ between experimental and non-experimental research.

Science understanding	Possible teaching considerations
• Explain the statement: Definitions of mental disorders are culturally constructed. • Discuss the influence of culture on mental health and how this has changed over time, e.g. in what the DSM has considered as mental disorders (such as homosexuality). • Describe the impact racism has on mental health for cultural groups such as aboriginals and refugees. • The DSM-IV states that the relationship between clinician and patient could be affected by cultural differences. Discuss some of the problems that could occur when clinician and patient do not come from the same cultural background.	Discuss what kinds of changes in society can contribute to increased mental health issues for the general population and for those of different ethnic backgrounds. For Aboriginal and Torres Strait Islander Australians, connection with country is critical for mental health. Discuss: • the role of country in Indigenous Australian mental health • how the mental health of Indigenous Australians has changed over time • the impact of racism on mental health • the reasons for this change • the supportive structures that could be put in place to address this change. • The social and emotional wellbeing for Aboriginals. Model developed by the Australian Indigenous Psychologists association (AIPA) http://www.indigenouspsychology.com.au/links
Social media use has become increasingly influential. • Discuss the positive and negative influences of social media on mental health. • Describe how behaviour modification could be used to improve a teenager's social media use. • Discuss the ethics of using behaviour modification for this purpose. • Discuss whether excessive involvement in social media should be considered an addiction with respect to proposed DSM changes.	Explore the following: • At what point does social media use become problematic (e.g. video games, watching sport)? • How can social media use be beneficial to individuals and society? • How can social media be used to improve mental health, e.g. social media agencies like Lifeline and Beyond Blue and what is needed to make them effective (e.g. staff training) • Addictions can be chemical or behavioural. Distinguish between the two types of addictions: how are they similar? how are they different? How should an addiction be defined? • Current research: Journal of Cyberpsychology, Behavior and Social Networking

Science understanding	Possible teaching considerations
Sleep is important for mental health • Discuss the following theories of sleep needs: – repair and restoration theory – evolutionary theory – information consolidation theory – clean-up theory. Discuss some of the personal and societal factors that can contribute to sleep deprivation. Describe some personal and organisational strategies that could be used to increase sleep duration and improve sleep quality	Investigate how one or more of the following are affected by sleep deprivation: personal relationships, the road toll, workplace accidents. Explore: • the influence of shift work on health • the influence of jet lag on task performance. Explore how much sleep is needed at different stages of life.
Stressors have a major influence on both mental and physical health. • Discuss what is meant by the term 'stress'. • Discuss whether the 'fight or flight response' has a positive or negative effect on health. • Use Selye's General Adaptation Syndrome model to explain the long-term effects of stress on health. • Explain how problem-focused and emotion-focused coping strategies attempt to address stress.	'Burnout' refers to the emotional depletion and loss of motivation that result from exposure to chronic stressors. • Investigate the types of occupations showing the greatest frequency of burnout. • Determine whether the stressors are short term or long term. • Research the methods used to measure 'burnout'. • Investigate some stress management strategies, such as: – time management – assertiveness training – relaxation or meditation – exercise
Anxiety disorders and depression are the most prevalent types of mental health problems among adolescents. • Discuss how cognitive-behavioural therapy (CBT) could be used to treat anxiety and depression. Discuss systematic desensitisation in the treatment of phobias. • Discuss some of the ethical issues associated with the treatment of anxiety disorders, depression and phobias.	George Engel (1913-1999) suggested that a biopsychosocial model be adopted when patients present for treatment. Investigate the basic principles of the biopsychosocial model of treatment and its advantages • Compare the biopsychosocial model with CBT as treatments for anxiety or depression.
	Research the effectiveness of electro-convulsive therapy (ECT) as a treatment for depression.

Science understanding	Possible teaching considerations	

• 'Resilience' refers to a person's mental ability to recover quickly from setbacks.
• Describe some of the protective factors that a resilient person could have.
• Differentiate between internal and external factors of resilience, giving examples of each.
• Describe how a person could learn to become more resilient.
• Resilience training as a more specifically targeted intervention for dealing with stress that can lead to mental illness
	• Explore the Theory of 'Positive Emotion' and resilience proposed by Broaden and Build.
	• Research has shown that many people show a remarkable capacity for resilience. Discuss how the following could affect resilience:
	  • holding positive views of oneself and one's abilities
	  • the capacity to make realistic plans and stick to them
	  • having an internal locus of control
	  • being a good communicator
	  • managing emotions effectively.
	• Explore resilience programs that exist globally and/or locally (for example the Penn Resilience Program) and research their effectiveness	

Topic 3: Organisational Psychology

Organisational Psychology involves the evidence-based study of organisations and particularly the work performance and job satisfaction of their members. It considers factors that affect work performance and job satisfaction at three levels: the individual, the group or team and the organisation. Organisational Psychologists use an understanding of these factors to enhance the performance and job satisfaction of the members of the organisation and the organisation itself.

Science understanding	Possible teaching considerations
Organisational psychology uses an evidence-based approach to understand the factors that affect an organisation's performance and the work performance and job satisfaction of its employees. • Define Organisational psychology It uses knowledge to facilitate an organisation's performance and the work performance and job satisfaction of its members. • Describe the role of organisational psychology for organisations There are different types of organisations including government, commercial and not for profit. Organisations also differ in the type of work they do, e.g. mining or farming, manufacturing, service industries etc • List different types of organisations • Classify different organisations based on the work they do	A suitable reference would be *Psychology Applied to Work* by Muchinsky and Culbertson (2016). Discuss how the knowledge involved in organisational psychology differs from that of other types of organisational knowledge. Investigate how organisations are classified in terms of the kind of work they do. As an exercise, students indicate the type of organisation in which their parent(s) work and how those types would be classified conventionally in terms of the type of work that is done. These types could be rank ordered from the most to the least common type of organisation. Discuss what kinds of key issues there might be at an individual, group and organisational level.
There are different types of measures that can be used to assess performance. • Explore some of the different measures that can be used to assess the performance of individuals, groups and organisations. – Individuals: (e.g. supervisor ratings, quantity and quality of work) – Groups: (e.g. sales, client feedback) – Organisation (e.g. profit, staff turnover). • Describe the advantages and disadvantages of each measure.	. Consider what kinds of organisational performance measures organisational psychologists would use such as productivity, quality standards, staff satisfaction, accidents, absenteeism and turnover etc. and what are their advantages and disadvantages.  

Science understanding	Possible teaching considerations
Finding the right job for a person is important for an individual and this is called vocational guidance • Define vocational guidance. An important concept in vocational guidance is vocational interests. There are theories of vocational interests, such as that of Holland, which has an associated measure called the 'Self-directed search' to assess an individual's vocational interests and the types of jobs that might be suited to that person's interests. • Explore theories of vocational interests such as Holland's theory • Describe how Holland's Self-directed search measure can be used to provide vocational guidance	Explore the following: • How many different types of jobs do most people know about? List the types of jobs that students think they would be interested in. Examine the lists of jobs in the Self-directed search manual (or similar available vocational interests' inventories) as a sample of the types of jobs available. • Discuss how most people find a job and what criteria they use for selecting a job • How accurate are students in guessing their three highest work interests on the Self-directed search before completing it (or similar available vocational interests inventory)?
Finding the right person for a job is important for the performance of an organisation and this is called personnel selection. • Define personnel selection • Discuss some critical characteristics that might influence finding the right person for a job, including work qualifications and skills, work experience, personality, interests, motivation, age, gender, ethnicity. A number of basic assessments are commonly used in personnel selection including resumes, references, psychological tests (e.g. intelligence / aptitudes, personality) and interviews, all of which have different levels of reliability and validity. • Explore assessments used in personnel selection • Discuss the validity and reliability of these assessments and measures. Internet testing and online interviewing are increasingly being used. • Explore the advantages (e.g. convenience), and disadvantages (e.g. personal identity theft) of internet testing and online interviewing • Discuss ethical issues associated with their use (e.g. revealing sources of information) Work performance can be considered in terms of different measures: • Explore the different ways of measuring work performance such as quantity, quality, work behaviours including interpersonal and safety, turnover and exit interviews.	Discuss which characteristics would be most important for an employer to consider when selecting the right person for a job and how these might have changed over time and how they might change in the future. Consider as an example of personality measure the Big Five Factors of Personality and their facets. Have students estimate their scores on a brief version of the Big Five Factors and check their accuracy after completing it. Discuss the implications of personality for different kinds of jobs. Explore: • What students think would be the most valid types of assessment for personnel selection and compare them to results from research. • What factors affect the validity of interviewing as an assessment (e.g. the halo effect) and how interviewing can be improved. • How people can best prepare for an interview Discuss issues related to the use of internet testing and online interviewing. Discuss different types of work performance assessment, the difficulties in using them and how to use them most effectively.

Science understanding	Possible teaching considerations	
Motivation is a key factor in organisational performance and there are a number of motivation theories, each emphasizing different critical factors. • Compare and contrast diverse motivational theories such as Theory X / Theory Y, Maslow's and Alderfer's hierarchies of needs, Herzberg two factor theory, Adam's equity theory, Vroom's expectancy theory, Locke's goal setting theory. • Explore Hackman and Oldham's job design theory as a measure of motivation	Discuss what motivated people to work at tasks like school work and jobs and what kinds of factors affect motivation. Consider some major theories of work motivation and the extent to which there is a need for more than one such theory. Have students fill out a measure of Hackman Oldham's job design theory, and consider the factors that have influenced their motivation scores, and how they could be increased.	
People now tend to work more in teams than individually due to changes in working conditions since the industrial revolution and particularly due to the rise in service industries in the last half of the 20th Century. • Explore the factors which have contributed to the modern workplace, teamwork and working conditions. • Explore factors that are important for developing and optimising team work, and the ability of a team to optimize performance and \ achieve common goals. Working effectively in teams depends on personal characteristics including personality and skills. • Describe the measures that can be used to assess team related characteristics, e.g. Myer – Briggs or Belbin's team roles. Several factors have been found to affect team performance. • Describe how some of the following factors or others could have a positive or negative impact on team performance: e.g. Communication, Conflict resolution, bullying, group think, team culture. • Explain how Information Processing theory and measures of conflict management styles can be used to understand and facilitate team communication.	• Discuss the types of jobs in which people must work together in teams. • Consider personal characteristic relevant to team effectiveness such as personality and Belbin's team roles. Have students estimate their profile on the Myer Briggs personality measure or Belbin's measure of team roles and check the accuracy of their estimates after completing the test. Have students consider the implications of their personal characteristics for working in teams and the need for a variety of team members with complementary characteristics. • Consider factors important for facilitating communication and conflict management in teams. Have students complete a measure of Thomas Kidman's conflict management styles to assess individual preferences. • Research factors that are important for developing and optimising team performance and their implications for team training. • Consider factors affecting the performance of virtual and interdisciplinary research teams.	

Science understanding	Possible teaching considerations
	• Have students work in teams (which might be face to face and / or virtual) to research an issue in organisational psychology, e.g. personnel selection or executive coaching, for presentation to the class, plus an analysis of what the team did well and how it could have been improved (e.g. in terms of Tuckman and Jensens's stages of team development). • Explore relatively recent developments such as virtual teams using the internet for convenience, and interdisciplinary research teams to advance areas of science such as medicine. In each case particular team related issues have been identified as affecting their performance.
Good leadership is essential for an organisation and its workers to perform well. • Compare the different theories of leadership in terms of assumed critical factors such as personality traits or environmental circumstances. e.g. trait theory, and contingency theories like that of Hersey and Blanchard	• Discuss what makes a good leader using examples from history and politics. • Investigate theories of leadership and the extent to which good leaders are born or can be taught to be a good leader.
	Consider the leadership style theories of Hersey and Blanchard. Students could be asked to research and summarise the key points from a book on leadership such as 'Legacy' by James Kerr, or 'Leadership' by General Stanley McChrystal

Science understanding	Possible teaching considerations
At the organisation level a key concept is that of organisational culture and a related concept is that of organisational climate. • Analyse Schein's concept of organisational culture. Organisational cultures can have subcultures (e.g. based on department, job type, age, gender, ethnicity) that affect the performance of the organisation and that of individuals and their job satisfaction. • Consider different types of subcultures in organisations and their implications Organisational culture and climate have been linked to organisational performance and measures have been developed to identify desired improvements in culture or climate. • Describe the difference between organisational culture and climate • Explain how culture and climate can affect organisational performance as well as inform better performance _____ Organisational psychology as a profession attempts to use organisational theories to understand how certain factors affect the performance of organisations and in particular how they affect individual and team work performance and job satisfaction. • Research the variety of organisation and work related jobs that organisational psychologists do and how these jobs have changed and are likely to change over time	Discuss what is meant by organisational culture in terms of Schein's definition of culture. Investigate how organisational climate has been defined and whether it is the same as, or different to, organisational climate. Consider different types of subcultures in organisations and their implications, e.g. in different year levels in schools. Research the relationship between organisational culture and organisational performance with respect to the work of Peters and Waterman Have students complete Kilman Saxton culture gap survey of the organisational culture of the school and discuss the extent to which students agree or differ and the implications for improving the school's culture. Consider the Nordic Safety Climate Questionnaire as an example of a work safety climate measure. Have students ask a working parent to fill in the measure on their work organisation. Compare the results in terms of which factors need improvement. _____ Watch the video produced by the Australian Psychological Society showing the work and profession of organisational psychologists. https://www.psychology.org.au/Training-and-careers/Careers-and-studying-psychology/careers-in-psychology/Psychologists-talk-about-careers . Consider some examples of research showing how individual work performance and job satisfaction and organisational performance, such as in safety, can be improved.

Topic 4: Social Influence

Humans are social beings. The behaviour of individuals and groups influences, and is influenced by, others. Social influence is an everyday phenomenon, but it can have dramatic effects. It can be reflected in courageous acts of defiance against unjust authority or in thousands, or hundreds of thousands, of people following the edicts of their leaders, even when these violate the followers' moral values. Human social interaction reveals many paradoxes about what it is to be human. Some interactions are characterised by violence and aggression; others are characterised by selfless assistance to others.

The study of social influence includes the impact of the presence or absence of other people on behaviour: obedience and conformity; attitude formation and attitude change; prejudice and persuasion and social media. The effects of social media use are still being researched, with some results being positive and others negative.

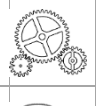
Science understanding	Possible teaching considerations	
Social influence is seen in obedience, conformity, attitude formation and attitude change, prejudice and persuasion. It is also evident in social media.		
Obedience is a form of social influence where an individual responds to a direct order, usually from an authority figure. Various factors influence obedience, including proximity to the authority figure, prestige of the authority figure, and deindividuation. • Describe three different factors that influence obedience.	Discuss whether the findings from experiments on conformity and obedience help us to understand real-life atrocities. For example: • Assimilation policy Australia (1937) The assimilation policy was a policy of absorbing Aboriginal people into white society through the process of removing children from their families (i.e. the 'stolen generation') and destruction of Aboriginal society. • The 'stolen generation' in Australia and the related oppression, obedience and social influence.	

Science understanding	Possible teaching considerations
	• Intervention (2007) for Aboriginal communities and people in Australia by John Howard and the Government • The massacre at My Lai (1968) • The Holocaust in Nazi Germany (1933-45) • The Rwanda genocide (1994) • Human rights violations against detainees in the Abu Ghraib prison in Iraq, revealed in 2004 • The systematic campaign of rape, murder and arson against the Rohingya (2017). Watch *The Stanford Prison Experiment*, a 2015 docudrama based on Philip Zimbardo's prison experiment. Discuss the following: • When do the powerful abuse their power? • When do the powerless give in to oppression? When do they resist? • What is the role of the group in these processes? 
Experimental investigations have been used to study obedience. The experimenter was able to manipulate an independent variable and observe the changes in the dependent variable. • Explain how an experimental investigation is different from other investigations. • Describe some advantages and disadvantages of the experimental design.	Explain why the investigations by both Milgram and Zimbardo were experiments. How were these investigations: • similar? • different? 
Milgram's experiments on obedience provided important insight into human behaviour, as did Zimbardo's prison experiment. • Explain why both experiments were heavily criticised for ethical reasons.	"For although the act condemns the doer, the end may justify him…" (Machiavelli, The Discourses: I, 9) Discuss this statement with reference to Milgram and Zimbardo's experiments.  

Science understanding	Possible teaching considerations
Conformity is one form of social influence where individuals yield to group pressures. It is affected by a number of different factors. • Explain how normative social influence, informational social influence and individual characteristics affect conformity. • Describe how the Assimilation policy in Australia (1937) and intervention (2007) and associated oppression, obedience, social influence and conformity affected the Aboriginal people and communities of Australia.	Are there different forms of conformity? Investigate: • compliance • internalisation • identification. Investigate deindividuation at https://www.units.miamioh.edu/psybersite/fans/deindividuation.shtml Watch: Utopia (a film by John Pilger) 2013 which describes the social influence of the assimilation policy (1937) and intervention (2007) on the Aboriginal people of Australia.
Observational designs have sometimes been used in the study of social influence, where the investigator collected data by observation of selected participants. • Explain how observational designs differ from experimental designs. • Describe some advantages and disadvantages of the observational design. • Describe the social, cultural and ethical impact of observational design post-colonization on Australian aboriginal people	Are there cultural differences in conformity? Explore the differences in conformity between individualistic and collectivist cultures at: https://www.verywellmind.com/what-are-individualistic-cultures-2795273 . Consider reading *Talking to my country: Stan Grant (2016)* Describe how: • experimental designs • observational designs could be used in studying conformity. Consider reading *Bruce Pascoe: Young dark Emu(2014)*
An attitude refers to a set of emotions, beliefs and behaviours toward a particular object, person, thing, or event. Persuasion is the art of convincing others to change their attitudes or behaviours. Various factors influence attitude formation and/or attitude change. • Describe how the source, message, audience, peripheral and central processing routes, direct and indirect experience affect the persuasion process.	Discuss the impact of persuasion, using articles such as the ones at these links: https://research.calvin.edu/german-propaganda-archive/ahspeak.htm (Adolf Hitler) or https://www.workingvoices.com/martin-luther-king-jr-communication-power/ (Dr Martin Luther King). Discuss whether it is ethical for psychologists to help advertisers use persuasion to target children as consumers. Are there cultural differences in persuasion attempts?

Science understanding	Possible teaching considerations
The detection of, and resistance to, persuasion tactics can be facilitated by an understanding of persuasion strategies. • Explain how the following strategies aim to persuade: – the norm of reciprocity – door-in-the-face – foot-in-the-door.	Explore the differences in effective persuasive strategies in individualistic cultures versus collectivist cultures at https://www.sciencedirect.com/science/article/pii/S002210318471016X and http://ceur-ws.org/Vol-1582/16Orji.pdf . Compare advertisements on television with those on social media and magazines targeting 18 to 35 year olds. 
The relationship between attitudes and behaviour is bidirectional. • Discuss how strength, accessibility and specificity of an attitude may influence behaviour. Behaviour also influences attitude. • Explain why, in the Stanford Prison Study, as the guards assumed their roles and began mistreating their prisoners, their attitude towards their prisoners changed. The attitude-behaviour link is not always consistent. • Discuss how situational pressures and self-monitoring may influence behaviour. • Discuss the consequences of inconsistency between attitudes and behaviour.	Explore Richard LaPierre's study into prejudice against Asians in the United States. Discuss the willingness of: • bystanders to challenge bullies in the school yard • smokers to give up smoking • people to donate to particular charities. Discuss the inability to predict recycling behaviour from a person's general attitude towards environmental issues (Oskamp, 1991). Discuss potential consequences of governments mandating certain behaviour. For example, the public greeting "Heil Hitler" in Germany or the ritual of singing the national anthem at public events. 
	Consider how the compliance-conformity distinction can be linked to the bidirectional relationship between attitudes and behaviour. Compare and contrast the work of Leary (2007) on impression management (self-presentation), Bem's work (1972) on self-perception, and the implications of Festinger's (1957) theory of cognitive dissonance. 

Science understanding	Possible teaching considerations
There are different ways of measuring attitudes. • Describe the advantages and disadvantages of using the following tests to measure attitudes: – self-reports – behavioural counts – Implicit Association Test. Prejudice is an attitude, and is a social issue. • Explain how prejudice, discrimination and stereotyping are linked. There are various reasons why people are prejudiced. • Explain how unintentional biases (including confirmation bias), exposure, and learning could lead to prejudice. The effects of prejudice are many. • Describe the effects of social stigma, internalisation of others' evaluations, and stereotype threat. There are various strategies for changing attitudes and reducing prejudice. Explicit forms of discrimination are now illegal and socially censored. • Describe how reluctance to help, tokenism and reverse discrimination are different from explicit forms of discrimination.	Do one of the demonstration tests at this link: https://implicit.harvard.edu/implicit/australia/takeatest.html Which one did you take? How did you do? What surprised you? Explain why you think you scored this way. Explore other unobtrusive measures of attitudes, including physiological indices, behavioural measures, the "bogus pipeline" and distance (how close, psychologically or physically, people are willing to get to one another). In 19th century Europe, Saartjie Baartman, a South African woman, was paraded before the public in London and Paris as an "exotic exhibit". Ota Benga (1883-1916), an African man, was housed in the monkey house at the Bronx Zoo (New York). How can confronting past acts of inhumane behaviour help us reduce prejudice today? Is bias a factor in police shootings? Go to https://www.npr.org/2017/06/13/532724743/police-shootings-how-a-culture-of-racism-can-infect-us-all to find out. Refer to *Pygmalion in the classroom*, and investigate Rosenthal and Jacobsen's experiment on the self-fulfilling prophecy. Discuss how the Ku Klux Klan's lynching's of African Americans and the Abu Ghraib prisoner abuse practices are examples of dehumanisation. Use the following link to discover another form of prejudice: https://www.npr.org/sections/codeswitch/2013/04/22/177455764/What-Does-Modern-Prejudice-Look-Like .

Science understanding	Possible teaching considerations	
Social influence operates everywhere, and it is evident on social networking sites. Self-presentation (impression management) involves manipulating others' perceptions of you. • Describe how self-presentation would be managed differently on social media than in face-to-face contact. • Explain how the images posted on social media demonstrate and validate self-concept. • Explain why high self-monitors are likely to engage in social media more often than low self-monitors. • Explain the importance of schemata, primacy, recency, and information that is distinctive in impression management. • Describe how social networking could play a useful role in training people to function well in society. • Explain why social media use could have a negative effect on mental health. There are ethical concerns with the use of social media.	Explain how self-presentation may become an important aspect in a person's life. Explain why self-presentation might be of greater or lesser importance for different people. Teens shown an image that was deemed to have lots of "likes" on social media tended to also like the image. (Refer to https://www.npr.org/2016/08/09/489284038/researchers-study-effects-of-social-media-on-young-minds).	
	Given the activation in the reward centres of the brain on seeing popular pictures on social media, explore the possibility of a person becoming addicted to social media use. (See https://news.rutgers.edu/news-release/social-media-your-mind-neuroscience-behind-hype/20120828#.XW4T8Bgr3q0).	
	Discuss whether it is ethical for psychologists to use a public forum to give advice.	
	Using social media, people are able to manage their self-presentation in ways that cannot be used in face-to-face contacts at home, school or work. This raises a number of ethical questions: • What are the normative guidelines directing the social media user's behaviour? • Are the behaviours of the social media users the same as the users' offline behaviours? • Do the online behaviours display any notable differences from the behaviours of people not using social media? • What are the dangers of only networking with people with similar interests, attitudes, personalities? • Explore research in this area by members of the Cyberpsychology Research group at the University of Sydney by Dr Brd Ridout, Dr Bridi O'Dea, Dr Andrew Campbell and Professor Neil Coulson (Nottingham University). https://www.sydney.edu.au/medicine-health/our-research/research-centres/cyberpsychology-research-group.html	

Science understanding	Possible teaching considerations
There are also ethical issues associated with research in the area of social influence. • Describe how some data collection techniques could cause physical or emotional discomfort. • Describe how well-being, deception, consent and privacy rights may be jeopardised in investigations in the area of social influence. There are also ethical issues associated with applications of research findings in the area of social influence. • Discuss: – the use of fear as a strategy to motivate behavioural change – the use of knowledge about components of attitudes and elements of persuasion by advertisers, political campaigners, employers, and corporations to change the behaviour of individuals and groups.	Explore the use of the "bogus pipeline" (or bogus lie detector) and deception as a means of convincing participants that you are able to measure their attitudes. Discuss the article "Advertising to children: is it ethical?" at http://mrpascaspasta.weebly.com/uploads/8/5/7/2/85723562/advertising_to_children_-_is_it_ethical_.pdf Explain how research into social influence has been used in both positive and negative ways. Explore the misuse of social influence research; for example extracting false confessions, indoctrination and 'thought reform'.

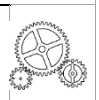
Topic 5: The Psychology of Learning

Learning is central to human survival, but the process is difficult to define because it takes so many different forms. In general, any relatively enduring change in either our potential to behave in particular ways, or our knowledge, that results from experience is known as learning. The process of learning is essential for us to survive in our environment, plan for the future, and acquire the social and cultural rules of our society. The main sources of human cultural diversity are the different ways in which cultures have learned to solve the universal problems of human existence.

The study of learning can be traced back to the origins of psychology as a branch of philosophy. The principles of learning have relevance in so many facets of our lives, including the areas of drug dependency and coping with chemotherapy and unemployment.

Universal ways of learning include classical conditioning, operant conditioning, and learning through observation or instruction. There are personal differences in the way we learn.

Science understanding	Possible teaching considerations	
Classical conditioning is a learning process that occurs when two stimuli are repeatedly paired. A response, which is at first elicited by a natural stimulus, is eventually elicited by what had previously been a neutral stimulus. • Describe Pavlov's experiment on salivation in dogs. • Describe the relationship between unconditioned stimuli, conditioned stimuli, unconditioned responses and conditioned responses in classical conditioning. • Explain the difference between acquisition and performance in classical conditioning. • Explain the importance of contiguity and contingency in classical conditioning. • Explain stimulus generalisation and stimulus discrimination. • Describe how the process of extinction would occur in classical conditioning.	Can classical conditioning make you sick? Can it make you healthy? Investigate: • anticipatory nausea and vomiting (ANV) in cancer patients • Ader and Cohen's immune suppression study.	
	Investigate examples of classical conditioning in real life: • lions in Africa being conditioned to dislike the taste of beef • therapy to combat anxieties and phobias • drug addiction • advertising. (Note that advertising is also discussed in the Social Influence topic.) Discuss ways in which supermarkets, shops or malls use principles of classical conditioning to influence the behaviour of shoppers. For example, how might music in the background, spruiking, placement of products on shelves or by the check-out, flashing "red-light" for specials, and tasting stands influence behaviour?	

Science understanding	Possible teaching considerations
Not all associations are equal. • Discuss the role of biological preparedness in the development of taste aversions and phobias. Principles of classical conditioning are used in psychological interventions. • Describe how systematic desensitisation of phobias is used.	Use spontaneous recovery to demonstrate that extinction is not the same thing as unlearning. Ivan Pavlov (1902) showed that classical conditioning applied to animals. Watson and Rayner (1920) showed that it also applied to humans. Investigate these two sets of experiments and discuss their importance. 
	Discuss the ethical considerations in the use of aversion therapy. 
Operant conditioning is a learning process in which the strength of a behaviour is modified by the consequences following the behaviour. • Explain how punishment is different from reinforcement. • Describe the differences between positive reinforcement and negative reinforcement. • Describe the differences between aversive punishment and response cost in operant conditioning. • Explain why, in attempts to change behaviour, reinforcement is favoured over punishment. • Explain the importance of contiguity and contingency in operant conditioning.	Behaviourism refers to a psychological approach emphasising scientific methods of investigation. The approach is only concerned with observable stimulus-response behaviours, and states all behaviours are learned through interaction with the environment. Explore the work of BF Skinner, a proponent of the behaviourist approach. 
	Investigate the psychological principles concerning operant conditioning in everyday experiences and events (e.g., coin deposit incentives to return shopping trolleys, customer loyalty programs). Discuss how immediate versus delayed consequences play a role in: • keeping to an exercise regime • maintaining a drug or smoking habit • speeding fines. 
• Use examples to describe fixed and variable schedules of reinforcement, and ratio and interval schedules of reinforcement. • Describe how schedules of reinforcement affect learning, extinction and performance. • Explain how operant conditioning could be used to shape a particular behaviour. • Use operant conditioning to explain the placebo effect.	Discuss examples of schedules of reinforcement in everyday life, such as: • piece work in a factory • gambling • social media • "watching the clock" during a class • fishing. Explore the techniques used by gambling industries to separate us from our money. 

Science understanding	Possible teaching considerations
Not all associations are equal. • Discuss the role of biological preparedness in the training of animals. Principles of operant conditioning are used in psychological interventions. Describe how behaviour modification techniques are used.	Find out how animal trainers use operant conditioning techniques. Explore the following questions: • How could societies be organised to maximise prosocial and minimise anti-social behaviour in citizens? • Are prisons a useful social investment? How has operant conditioning been used to enhance human welfare?
We also learn through observation. • Explain how learning through observation is different from operant conditioning. • Describe how the characteristics of the role model influence learning through observation. • Albert Bandura studied aggression in children (the Bobo doll studies) by observing their behaviour. Explain the advantage of using behavioural counts in research. • Describe the evidence for mirror cells in the brain being involved in observational learning.	Albert Bandura views observational learning as a cognitive process, involving a number of steps. Find out what these are. Evaluate Bandura's theory for strengths and weaknesses.
	Explore the difference between explicit and implicit observational learning. Investigate the effects of viewing media violence. Investigate how mirror cells change when we observe others (Mukamel et al., 2010).
There are personal differences in the way we learn. • Describe how the characteristics of the learner influence learning. • Describe how to cognitive behavioural therapy could be tailored to meet different people's needs.	Explore the differences between surface, strategic and deep learning, and the consequences of these differences. Investigate the following questions. • Are there gender differences in learning? • Are there differences in learning as we age? • Are there generational differences in learning? • Do individuals differ in their learning styles? • What is the difference between learning and training?

Science understanding	Possible teaching considerations	
Guidelines for research and practice are published by the Psychology Board of Australia. The purpose of these guidelines is to protect research participants, the reputation of psychology and psychologists themselves. • Discuss how the following experiments contravened current ethical guidelines: – Watson and Rayner's "Little Albert" study in classical conditioning – Bandura, Ross and Ross's "Bobo doll" study of modelling and aggression – Seligman's learned helplessness experiment.	Explore the following: • Is it ever acceptable to have participants learn maladaptive responses to show how maladaptive responses are acquired and maintained? • Can the use of aversive stimuli be justified in therapeutic settings? • What ethical guidelines need to be in place for psychologists asked to change a child's behaviour that parents or others do not like? • Is it ever acceptable to provide institutionalised people with liquefied food, instead of their normal food, if they do not maintain daily hygiene practices?	

ASSESSMENT SCOPE AND REQUIREMENTS

All Stage 2 subjects have a school assessment component and an external assessment component.

EVIDENCE OF LEARNING

The following assessment types enable students to demonstrate their learning in Stage 2 Psychology.

School assessment (70%)

- Assessment Type 1: Investigations Folio (30%)
- Assessment Type 2: Skills and Applications Tasks (40%)

External assessment (30%)

Assessment Type 3: Examination (30%).

Students provide evidence of their learning through six to seven assessments, including the external assessment component. Students complete:

- at least one psychological investigation
- one investigation with a focus on science as a human endeavour
- at least three skills and applications tasks
- one examination.

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
- teachers and assessors to 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 and assessors 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 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 new and familiar 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 (30%)

Students undertake:

- at least one psychological investigation. Where only one psychological investigation is undertaken it must include deconstruction of a problem and design of a psychological investigation
- one investigation with a focus on science as a human endeavour.

Students investigate psychological concepts and relationships through analysis of an appropriate data set to identify an area for future research. Students are required to formulate an evidence-based conclusion. The area of interest of investigations will be directly related to one or more of the topics studied at Stage 2 Psychology. Teachers should provide advice to students about the suitability of the chosen topic, particularly in light of ethical considerations for psychological research. Teachers can choose to use the same data set for the class or allow students to select their own data set. Each data set must be referenced.

Appropriate data sets for analysis include:

- https://data.gov.au/
- https://www.lsay.edu.au/data
- https://www.fya.org.au/our-research/
- data from social media sites.

As a set, investigations should enable students to:
- work individually or collaboratively
- investigate a question or hypothesis for which the outcome is uncertain and is linked to one of the topics in Stage 2 Psychology
- individually deconstruct a problem to design their own process or method and justify their plan of action.

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
- conclusion, with justification.

Evidence of deconstruction (where applicable) should outline the deconstruction process, the method designed as most appropriate, and a justification of the plan of action, to a maximum of 4 sides of an A4 page. Suggested formats for this evidence include flow charts, concept maps, tables, or notes. This evidence must be attached to the report.

The report should be a maximum of 1500 words if written, or a maximum of 9 minutes for an oral presentation, or the equivalent in multimodal form.

Only the following sections of the report are included in the word count:
- introduction
- analysis of results
- evaluation of procedures used in collection of the data in selected study
- conclusion and justification.

Suggested formats for presentation of a practical investigation report include:
- a written report
- an oral presentation
- a multimodal product.

Science as a Human Endeavour (SHE) Investigation

Students investigate contemporary examples of how science interacts with society. This may focus on one or more of the key concepts of science as a human endeavor. Contexts may be drawn from science understanding in Psychology or others beyond the immediate content.

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; communication and collaboration, development and application, and impact and influence.

The SHE concepts can be viewed through:

- Economic, sociocultural, religious, ecological, environmental, sustainable, ideological and political perspectives in a local, national and global context.

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

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

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

Based on their investigation, students prepare a scientific communication.

The communication should be a maximum of 1500 words if written, or a maximum of 9 minutes for an oral presentation, or the equivalent in multimodal form.

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

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

Assessment Type 2: Skills and Applications Tasks (40%)

Students complete at least three skills and applications tasks, including at least one skills and applications task from each of the non-examined topics:

- Topic 1: Psychology of the individual
- Topic 3: Psychological Health and Wellbeing
- Topic 4: Organisational Psychology

At least one skills and applications task should be under the direct supervision of the teacher. The supervised setting should be appropriate to the task.

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 components, 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 data

- evaluating procedures and identifying their limitations
- formulating and justifying conclusions
- representing psychological information diagrammatically or graphically
- 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
- 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.

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

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

EXTERNAL ASSESSMENT

Assessment Type 3: Examination (30%)

Students undertake a 130-minute online examination.

Stage 2 science inquiry skills and science understanding from the following Stage 2 Psychology topics are assessed:

- Topic 4: Social influence
- Topic 5: The Psychology of Learning

Questions will include short-answer and an extended-response to a scenario.

The following specific features of the assessment design criteria for this subject may be assessed in the external examination:

- 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 and assessors 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 each school assessment type, the teacher makes a decision about the quality of the student's learning by:

- referring to the performance standards
- assigning a grade between A+ and E– for the assessment type.

The student's school assessment and external assessment are combined for a final result, which is reported as a grade between A+ and E–.

Performance Standards for Stage 2 Psychology

	Investigation, Analysis, and Evaluation	Knowledge and Application
A	Critically deconstructs a problem and designs a logical, coherent, and detailed psychological investigation. 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. Highly effectively application of psychological concepts in new and familiar 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. 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. Mostly effective application of psychological concepts in new and familiar 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. 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. Generally effective application of psychological concepts in new or familiar 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 in familiar contexts. 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 in familiar contexts. 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 both the school assessment and the external 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 2 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, which are on the SACE website (www.sace.sa.edu.au).