Government of **Western Australia**
School Curriculum and Standards Authority

SAMPLE COURSE OUTLINE

PSYCHOLOGY

ATAR YEAR 12

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

Disclaimer

Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course. Teachers must exercise their professional judgement as to the appropriateness of any they may wish to use.

Sample course outline

Psychology – ATAR Year 12

Semester 1 – Unit 3 – Memory and learning

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

For the named theorist in this unit (Bandura), students should demonstrate an understanding of:

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

For designated studies in this unit (Craik and Tulving, 1975; Pavlov, 1902; Watson and Rayner, 1920; Thorndike, 1898; Skinner, 1938; Bandura, Ross and Ross, 1961), students should demonstrate an understanding of:

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

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

The Science inquiry content and the Psychological knowledge and understanding content are intrinsically linked. Science inquiry skills are common to both Unit 3 and Unit 4 and are incorporated into all learning and assessment activities.

Week	Key teaching points

1–2	**Science inquiry**
	Ethical guidelines and practices for psychological research
	• the role of ethics/ethical guidelines in psychological research
	  ▪ the role of ethics committee approval and monitoring of conduct for all psychological research
	• understand and apply ethical guidelines and practices related to human participants
	  ▪ protection from harm – physical and psychological
	  ▪ informed consent
	  ▪ withdrawal rights
	  ▪ deception
	  ▪ confidentiality
	  ▪ privacy
	  ▪ voluntary participation
	  ▪ debriefing
	Communicating
	• use appropriate psychological terminology
	• acknowledge sources of information using appropriate referencing

Week	Key teaching points

	Memory
	• sensation and perception
	  ▪ processes of sensation – reception, transduction, transmission
	  ▪ processes of perception – selection, organisation and interpretation

2–4	**Memory**
	• models for explaining memory
	  ▪ processes of memory – encoding, storage, retrieval
	  ▪ features of the multi-store model of memory (Atkinson and Shiffrin, 1968)
	  ○ sensory register: duration, capacity, encoding (iconic and echoic)
	  ○ short-term memory: duration, capacity, encoding
	  ○ long-term memory: duration, capacity, encoding
	  – implicit – procedural
	  – explicit (declarative) – semantic and episodic
	  ▪ features of the working memory model (Baddeley and Hitch, 1974; Baddeley, 2000)
	  ○ central executive, phonological loop, visuospatial sketchpad, episodic buffer
	
	Science inquiry
	Formulating research
	• identify the aim/s of the research
	• identify variables
	  ▪ independent
	  ▪ dependent
	  ▪ control
	  ▪ extraneous – participant, environment, researcher
	  ▪ confounding
	• construct/formulate a hypothesis or inquiry question
	  ▪ directional and non-directional hypothesis (quantitative)
	  ▪ inquiry questions (qualitative)
	
	Data collection
	• types of data
	  ▪ qualitative data
	  ▪ quantitative data
	
	Processing and analysing data
	• construct and interpret data displays
	  ▪ graphs – scatterplot, column, line, histogram
	  ▪ tables – summary, frequency
	• calculate and interpret the mean and median as measures of central tendency
	
	Drawing conclusions
	• evidence-based conclusions consistent with psychological evidence and relevant to the hypothesis or inquiry question

5	**Memory**
	• memory formation
	  ▪ structures of the brain
	  ○ the role of the hippocampus in the formation and storage of memory
	  – Henry Molaison – case study
	  ○ the role of the cerebellum in the formation and storage of implicit memories
	  ○ the role of the amygdala in the formation of memories

Week	Key teaching points
	Science inquiry **Methodology** • selection of participants ▪ identification of sample and population ▪ methods to sample participants – application, method, strengths and limitations ○ convenience sampling ○ snowballing ○ random sampling ○ stratified sampling • allocation of participants – application, method, strengths and limitations ▪ random allocation **Task 1: Response (Test) – Memory and Science inquiry**
6–7	**Memory** • process of remembering and forgetting ▪ remembering ○ the role of recall (free, serial and cued), recognition and relearning in memory ○ levels of processing model of memory (Craik and Lockhart, 1972) – shallow (structural, phonemic) and deep (semantic) processing – study: Depth of processing and the retention of words in episodic memory – experiment two (Craik and Tulving, 1975) ▪ rehearsal as a strategy to improve memory ○ maintenance rehearsal ○ elaborative rehearsal ○ role of repetition as seen in Ebbinghaus and the forgetting curve (1885) **Science inquiry** **Methodology** • sources and effects of extraneous variables and confounding variables ▪ placebo effect ▪ experimenter effect ▪ demand characteristics • minimise the effects of extraneous and confounding variables ▪ random allocation of participants ▪ use of a placebo ▪ single-blind and double-blind procedures ▪ standardisation of procedures and instructions
8–9	**Memory** • process of remembering and forgetting ▪ forgetting ○ types of forgetting – retrieval failure – interference – proactive and retroactive – motivated forgetting – decay theory ▪ causes of memory loss and impacts on behaviour and emotion ○ trauma – Chronic Traumatic Encephalopathy (CTE) ○ degeneration – Alzheimer's disease ○ drug-induced – Wernicke-Korsakoff Syndrome (WKS)

Week	Key teaching points

	Science inquiry
	Methodology
	• types of research designs – application, method, strengths and limitations
	  ▪ non-experimental
	  ○ case studies
	  ○ correlational
	  ○ longitudinal
	  ○ cross-sectional
	Processing and analysing data
	• interpret Pearson's correlation coefficient as a measure of strength and direction of linear relationships
	Evaluation of research
	• application and use of the concept of validity as a measure of evaluating research
	  ▪ internal validity
	  ▪ external validity
	• application and use of the concept of reliability as a measure of evaluating research
	  ▪ test-retest reliability
	  ▪ inter-rater reliability
	• generalisability of sample to the population
	• suggest relevant improvements to address limitations of research
	• ethical implications
	• critical evaluation of information from a range of scientific sources
	Task 2: Science Inquiry (Research) – Memory – Remembering and forgetting

10	**Learning**
	• theories of learning
	  ▪ classical conditioning
	  ○ reflex and learnt components – neutral stimulus, unconditioned stimulus, unconditioned response, conditioned stimulus, conditioned response
	  ○ key principles – acquisition, stimulus generalisation, discrimination, extinction and spontaneous recovery
	  ○ study: Pavlov's dogs (Pavlov, 1902)
	  ○ study: 'Little Albert' experiment (Watson and Rayner, 1920)
	  ▪ application and evaluation of learning theories in behaviour modification
	  ○ systematic desensitisation as a treatment for phobias

11–12	**Learning**
	• theories of learning
	  ▪ operant conditioning
	  ○ three phase model – antecedent, behaviour, consequence
	  ○ reinforcement
	  – role of reinforcers – positive and negative
	  ○ punishment
	  – role of punishers – positive and negative
	  ○ schedules of reinforcement
	  – continuous
	  – intermittent – fixed, variable, interval and ratio
	  ○ study: Law of effect (Thorndike, 1898)
	  ○ study: The Behaviour of Organisms – Skinner box experiments (Skinner, 1938)
	  ▪ application and evaluation of learning theories in behaviour modification
	  ○ token economies

Week	Key teaching points
	Science inquiry **Ethical guidelines and practices for psychological research** • use of animals in research ▪ replacement, reduction, refinement **Data collection** • methods of data collection – application, strengths and limitations ▪ qualitative ○ interviews – focus group and individual; structured, semi-structured ○ open-ended survey ▪ quantitative ○ objective physiological measures – heart rate, breathing rate, galvanic skin response (GSR) ○ subjective measures –rating scales, such as Likert scales ▪ mixed methods – data collection may be a combination of qualitative and quantitative data ▪ differences between subjective and objective data
13–14	**Learning** • theories of learning ▪ social learning theory – Bandura (1977) ○ process of observational learning – attention, retention, reproduction, motivation ○ modelling – vicarious reinforcement ○ study: 'Bobo doll' experiment (Bandura, Ross and Ross, 1961) **Science inquiry** **Methodology** • types of research designs – application, method, strengths and limitations ▪ experimental (control and experimental group) ▪ non-experimental ○ observational **Task 3: Response (Test) – Learning and Science inquiry**
15	**Unit 3 revision**
16	**Task 4: Semester 1 examination – Unit 3 content (3 hours)**

Semester 2 – Unit 4 – Psychology motivation, wellbeing and health

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

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

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

For designated studies in this unit (He et al., 2020), students should demonstrate an understanding of:

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

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

The Science inquiry content and psychological knowledge and understanding content are intrinsically linked. Science inquiry skills are common to both Unit 3 and Unit 4 and are incorporated into all learning and assessment activities.

Week	Key teaching points

1–2	**Motivation and wellbeing**
	• sources of motivation – physiological, cognitions, emotions, social
	• self-determination theory – Deci and Ryan (2000)
	  ▪ amotivation, extrinsic and intrinsic motivation
	  ▪ self-determination continuum – regulatory styles
	  ▪ psychological needs for motivation – autonomy, competence, relatedness
	• hierarchy of needs – Maslow (1954, 1970)
	  ▪ levels of motivation based on deficiency and growth needs (1954)
	  ○ deficiency needs – physiological, safety, love and belongingness, esteem
	  ○ growth needs – self-actualisation
	  ▪ expanded hierarchy of needs (1970) – cognitive, aesthetic and transcendence needs
	  ▪ concept of self-actualisation
	  ○ characteristics of a self-actualised person
	
	Science inquiry
	Ethical guidelines and practices for psychological research
	• the role of ethics/ethical guidelines in psychological research
	  ▪ role of ethics committee approval and monitoring of conduct for all psychological research
	• understand and apply ethical guidelines and practices related to human participants
	  ▪ protection from harm – physical and psychological
	  ▪ informed consent
	  ▪ withdrawal rights
	  ▪ deception

Week	Key teaching points
	▪ confidentiality ▪ privacy ▪ voluntary participation ▪ debriefing • use of animals in research ▪ replacement, reduction, refinement **Communicating** • use appropriate psychological terminology • acknowledge sources of information using appropriate referencing
3–5	**Motivation and wellbeing** • models of wellbeing ▪ subjective wellbeing – model of subjective wellbeing – Diener (1984) ○ key components – life satisfaction, affective balance (positive and negative affect) ▪ psychological wellbeing – six factor model of wellbeing – Ryff (1989) ○ autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, self-acceptance **Science inquiry** **Formulating research** • identify the aim/s of the research • identify variables ▪ independent ▪ dependent ▪ control ▪ extraneous – participant, environment, researcher ▪ confounding • construct/formulate a hypothesis or inquiry question ▪ directional and non-directional hypothesis (quantitative) ▪ inquiry questions (qualitative) **Methodology** • selection of participants ▪ identification of sample and population ▪ methods to sample participants – application, method, strengths and limitations ○ convenience sampling ○ snowballing ○ random sampling ○ stratified sampling • allocation of participants – application, method, strengths and limitations ▪ random allocation • sources and effects of extraneous variables and confounding variables ▪ placebo effect ▪ experimenter effect ▪ demand characteristics • minimise the effects of extraneous and confounding variables ▪ random allocation of participants ▪ use of a placebo ▪ single-blind and double-blind procedures ▪ standardisation of procedures and instructions **Data collection** • types of data ▪ qualitative data ▪ quantitative data

Week	Key teaching points

	• methods of data collection – application, strengths and limitations
	  ▪ qualitative
	  ○ interviews – focus group and individual; structured, semi-structured
	  ○ open-ended survey
	Task 5 – Response (Test) – Motivation and wellbeing and Science inquiry

6–7	**Applications of psychology to health**
	• stress as defined by Selye (1936)
	  ▪ types of stress – distress and eustress (Selye, 1983)
	• stressors
	  ▪ types of stressors – psychological, environmental, social, cultural
	  ▪ characteristics of stressors –source (internal, external), duration (acute, chronic), strength/intensity
	• models of stress
	  ▪ stress as a response – General Adaptation Syndrome (GAS) model (Selye, 1936, 1983)
	  ○ physiological response to stress – heart rate, breathing rate
	  ○ characteristics of stages – alarm (shock, counter shock), resistance, exhaustion
	Science inquiry
	Data collection
	• methods of data collection – application, strengths and limitations
	  ▪ quantitative
	  ○ objective physiological measures – heart rate, breathing rate, galvanic skin response (GSR)
	  ○ subjective measures –rating scales, such as Likert scales
	  ▪ mixed methods – data collection may be a combination of qualitative and quantitative data
	• differences between subjective and objective data

8–9	**Applications of psychology to health**
	• models of stress
	  ▪ stress as a stimulus
	  ○ application of the Social Readjustment Scale (Holmes and Rahe, 1967) to assess the impact of stressors on individual health and wellbeing
	  ▪ stress as a transaction – Transactional Theory of Stress and Coping (Lazarus and Folkman, 1984)
	  ○ interaction between individual and environment
	  ○ role of cognitive appraisal – primary and secondary appraisal
	  ○ methods of coping – problem-focused, emotion-focused
	• health-related consequences of stress – maladaptive and adaptive coping strategies
	Task 6 – Response (Test) – Applications of psychology to health and Science inquiry

10	**Applications of psychology to health**
	• purpose of sleep – evolutionary and restorative
	• sleep–wake cycle
	  ▪ sleep as an example of a circadian rhythm
	  ▪ three stages of non-rapid eye movement (NREM) and one stage of rapid eye movement (REM)
	  ○ characteristics – heart rate, eye movement, muscle tension, brainwave patterns as measured by electroencephalography (EEG)
	  ○ length and repetition of the sleep cycle

Week	Key teaching points

11–12	**Applications of psychology to health**
	• sleep deprivation
	  ▪ causes of sleep deprivation – shift work, drugs, sleep environment, stressors
	  ▪ psychological and physiological effects of acute and chronic sleep deprivation
	  ○ acute sleep deprivation – mood, attention, reflex speed, vision
	  ○ chronic sleep deprivation – heart disease, obesity, insomnia, anxiety
	
	Science inquiry
	Methodology
	• types of research designs – application, method, strengths and limitations
	  ▪ experimental (control and experimental group)
	  ▪ non-experimental
	  ○ observational
	  ○ case study
	  ○ correlational
	  ○ longitudinal
	  ○ cross-sectional
	
	Formulating research
	• identify variables
	  ▪ independent
	  ▪ dependent
	  ▪ control
	  ▪ extraneous – participant, environment, researcher
	  ▪ confounding
	
	Commence Task 7: Science inquiry (practical) – Application of psychology to health – Sleep hygiene

13–14	**Applications of psychology to health**
	• techniques to improve sleep hygiene – management of electronic devices, consistent sleep patterns, creation of a healthy sleep environment
	  ▪ study: Effect of restricting bedtime mobile phone use on sleep, arousal, mood and working memory (He et al., 2020)
	
	Science inquiry
	Processing and analysing data
	• construct and interpret data displays
	  ▪ graphs – scatterplot, column, line, histogram
	  ▪ tables – summary, frequency
	• calculate and interpret the mean and median as measures of central tendency
	• interpret Pearson's correlation coefficient as a measure of strength and direction of linear relationships
	
	Drawing conclusions
	• evidence-based conclusions consistent with psychological evidence and relevant to the hypothesis or inquiry question
	
	Evaluation of research
	• application and use of the concept of validity as a measure of evaluating research
	  ▪ internal validity
	  ▪ external validity
	• application and use of the concept of reliability as a measure of evaluating research
	  ▪ test-retest reliability
	  ▪ inter-rater reliability
	• generalisability of sample to the population
	• suggest relevant improvements to address limitations of research

Week	Key teaching points
	• ethical implications • critical evaluation of information from a range of scientific sources **Submit Task 7: Science inquiry (practical) – Application of psychology to health – Sleep hygiene**
15	**Unit 3 and Unit 4 revision**
16	**Task 8: Semester 2 examination – Unit 3 and Unit 4 content (3 hours)**