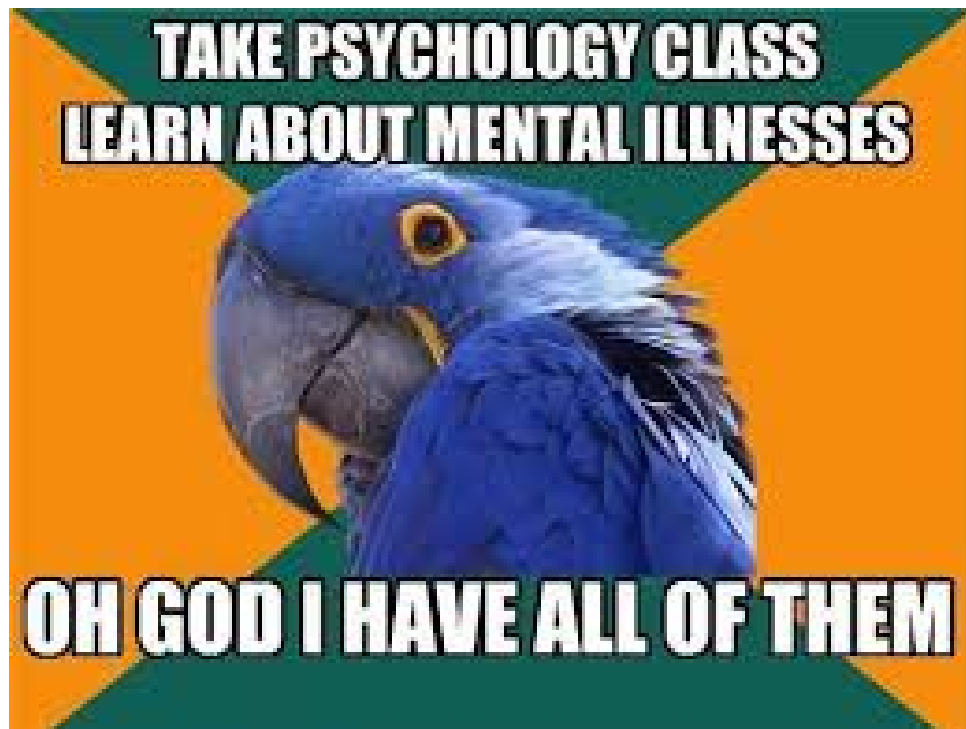




## **VCE INDUCTION PACKAGE 2021-2022**



**UNITS 3 AND 4**

# **PSYCHOLOGY**

## Welcome to Psychology Units 3 and 4!

Dear Psychology students,

Welcome to Year 12 Psychology. We are really excited to be teaching you next year.

The year 12 course is varied in nature; there will be sections that get quite biological, there will be bits that can be boring (research methods) and most of it you will be able to relate to from your own experiences in life.

We want you to see Psychology as not only one of your Year 12 subjects, but also as an opportunity to learn more about yourself, behavior, and just being a human.

Best wishes for 2022 – let's hope it's better than last year! The Psych team

### POLICIES:

Students are expected to check their Teams messages AND google classroom feeds regularly.

Students need to be aware that to obtain an S for each unit students are to:

- Attend a minimum of 90% of classes
- Complete the coursework
- Obtain at least 40% on all outcomes.
- Digital Logbook – on Google classroom
- Devices ONLY used for textbook or research. All class notes must be handwritten.

## ***Holiday Homework***

In order to get a head start and assist in your understanding, you must complete the holiday homework set during transition. This must be completed by day one of term next year. You will be required to complete a Scientific Poster that covers some of the research methodology that is in Chapter 1. You will also have some Edrolo Topics set by your teacher during transition.

If you have not completed Units 1 and 2, you **MUST** see your teacher who will give you an information booklet.

## Assessment of levels of achievement

The student's level of achievement in Unit 3 and 4 will be determined by school-assessed coursework and an end of year examination.

### **Materials Required – Textbook, Stationery, and loose-leaf folder.**

This year we will be using a combination of the Grivas textbook and the online Edrolo textbook and resources.

## **VCE UNITS 3 & 4 PSYCHOLOGY ASSESSMENT SCHEDULE**

### UNIT 3

Outcome	Date	%age of study score
<b>OUTCOME 1:</b> Nervous system functioning & stress - test	Term 1  50 marks	Worth 8 % of study score
<b>OUTCOME 2:</b> Memory visual presentation Models of learning Test	Term 2 25 marks 25 marks	Worth 8 % of study score
<b>END OF UNIT PRACTICE EXAM</b>	JUNE	

### UNIT 4

Outcome	Date	Student Date
<b>OUTCOME 1:</b> Nature of consciousness and sleep – Test	Term 3  30 marks	Worth 8 % of study score
<b>OUTCOME 2:</b> Mental Health - media response	Term 3  30 marks	Worth 8 % of study score
<b>OUTCOME 3:</b> Practical Investigation	Term 3  30 marks	Worth 8 % of study score
<b>END OF YEAR EXAM- Unit 3 and 4</b>	NOVEMBER	Worth 60 % of study score

# OUTLINE OF STUDY

## Unit 3: How does experience affect behaviour and mental processes?

### Area of Study 1

#### How does the nervous system enable psychological functioning?

#### Outcome 1

On completion of this unit the student should be able to explain how the structure and function of the human nervous system enables a person to interact with the external world and analyse the different ways in which stress can affect nervous system functioning.

##### **Nervous system functioning**

- the roles of different divisions of the nervous system (central and peripheral nervous systems and their associated sub-divisions) in responding to, and integrating and coordinating with, sensory stimuli received by the body
- the distinction between conscious and unconscious responses by the nervous system to sensory stimuli, including the role of the spinal reflex
- the role of the neuron (dendrites, axon, myelin and axon terminals) as the primary cell involved in the reception and transmission of information across the synapse (excluding details related to signal transduction)
- the role of neurotransmitters in the transmission of neural information between neurons (lock-and-key process) to produce excitatory effects (as with glutamate) or inhibitory effects (as with gamma amino butyric acid [GABA])
- the effects of chronic changes to the functioning of the nervous system due to interference to neurotransmitter function, illustrated by the role of GABA in Parkinson's disease.

##### **Stress as an example of a psychobiological process**

- sources of stress (eustress and distress) including daily pressures, life events, acculturative stress, major stress and catastrophes that disrupt whole communities
- models of stress as a biological process, with reference to Selye's General Adaptation Syndrome of alarm reaction (shock/counter shock), resistance and exhaustion, including the 'fight-flight-freeze' response and the role of cortisol
- models of stress as a psychological process, with reference to Richard Lazarus and Susan Folkman's Transactional Model of Stress and Coping (stages of primary and secondary appraisal)
- context-specific effectiveness, coping flexibility and use of particular strategies (exercise and approach and avoidance strategies) for coping with stress.

## Area of Study 2

### How do people learn and remember?

#### Outcome 2

On completion of this unit the student should be able to apply biological and psychological explanations for how new information can be learnt and stored in memory, and provide biological, psychological and social explanations of a person's inability to remember information.

##### Neural basis of learning and memory

- neural plasticity and changes to connections between neurons (including long-term potentiation and long-term depression) as the fundamental mechanisms of memory formation that leads to learning
- the role of neurotransmitters and neurohormones in the neural basis of memory and learning (including the role of glutamate in synaptic plasticity and the role of adrenaline in the consolidation of emotionally arousing experiences).

##### Models to explain learning

- classical conditioning as a three-phase process (before conditioning, during conditioning and after conditioning) that results in the involuntary association between a neutral stimulus and unconditioned stimulus to produce a conditioned response, including stimulus generalisation, stimulus discrimination, extinction and spontaneous recovery
- operant conditioning as a three-phase model (antecedent, behaviour, consequence) involving reinforcers (positive and negative) and punishment (including response cost) that can be used to change voluntary behaviours, including stimulus generalisation, stimulus discrimination and spontaneous recovery (excluding schedules of reinforcement)
- observational learning as a method of social learning, particularly in children, involving attention, retention, reproduction, motivation and reinforcement
- the 'Little Albert' experiment as illustrating how classical conditioning can be used to condition an emotional response, including ethical implications of the experiment.

##### Process of memory

- the multi-store model of memory (Atkinson-Shriffin) with reference to the function, capacity and duration of sensory short-term and long-term memory
- interactions between specific regions of the brain (cerebral cortex, hippocampus, amygdala and cerebellum) in the storage of long-term memories, including implicit and explicit memories

##### Reliability of memory

- methods to retrieve information from memory or demonstrate the existence of information in memory, including recall, recognition, relearning and reconstruction
- the effects of brain trauma on areas of the brain associated with memory and neurodegenerative diseases, including brain surgery, anterograde amnesia and Alzheimer's disease
- the factors influencing a person's ability and inability to remember information, including context and state dependent cues, maintenance and elaborative rehearsal and serial position effect
- the reconstruction of memories as evidence for the fallibility of memory, with reference to Loftus' research into the effect of leading questions on eye-witness testimonies.

# Unit 4: How is wellbeing developed and maintained?

## Area of Study 1

### How do levels of consciousness affect mental processes and behaviour?

#### Outcome 1

On completion of this unit the student should be able to explain consciousness as a continuum, compare theories about the purpose and nature of sleep, and elaborate on the effects of sleep disruption on a person's functioning.

##### Nature of consciousness

- consciousness as a psychological construct that varies along a continuum, broadly categorised into normal waking consciousness and altered states of consciousness (naturally occurring and induced)
- the measurement of physiological responses to indicate different states of consciousness, including electroencephalograph (EEG), electromyograph (EMG), electro-oculograph (EOG) and other techniques to investigate consciousness (measurement of speed and accuracy on cognitive tasks, subjective reporting of consciousness, including sleep diaries, and video monitoring)
- changes in a person's psychological state due to levels of awareness, controlled and automatic processes, content limitations, perceptual and cognitive distortions, emotional awareness, self-control and time orientation
- changes in levels of alertness as indicated by brain waves patterns (beta, alpha, theta, delta) due to drug induced altered states of consciousness (stimulants and depressants)
- the effects on consciousness (cognition, concentration and mood) of one night of full sleep deprivation as a comparison with effects of legal blood-alcohol concentrations.

##### Importance of sleep

- sleep as a regular and naturally occurring altered state of consciousness that follows a circadian rhythm and involves the ultradian rhythms of REM and NREM Stages 1–4 sleep excluding corresponding brain wave patterns and physiological responses for each stage
- theories of the purpose and function of sleep (REM and NREM) including restoration theory and evolutionary (circadian) theory
- the differences in sleep across the lifespan and how these can be explained with reference to the total amount of sleep and changes in a typical pattern of sleep (proportion of REM and NREM) .

##### Effects of sleep disturbances and possible treatments

- changes to a person's sleep-wake cycle and susceptibility to experiencing a circadian phase disorder, including sleep-wake shifts in adolescence, shift work and jet lag
- the effects of partial sleep deprivation (inadequate sleep either in quantity or quality) on a person's affective (amplified emotional responses) behavioural and cognitive functioning
- the distinction between dysomnias (including narcolepsy and sleep-onset insomnia) and parasomnias (including sleep apnoea and sleep walking) with reference to the effects on a person's sleep-wake cycle
- the interventions to treat sleep disorders including cognitive behavioural therapy (with reference to insomnia) and bright light therapy (with reference to circadian phase disorders).

## Area of Study 2

### What influences mental wellbeing?

#### Outcome 2

On completion of this unit the student should be able to explain the concepts of mental health and mental illness including influences of risk and protective factors, apply a biopsychosocial approach to explain the development and management of specific phobia, and explain the psychological basis of strategies that contribute to mental wellbeing.

##### Defining mental health

- mental health as a continuum (mentally healthy, mental health problems, mental disorders) influenced by internal and external factors that can fluctuate over time
- the typical characteristics of a mentally healthy person, including high levels of functioning, social and emotional well-being and resilience to life stressors
- ethical implications in the study of, and research into, mental health, including informed consent and use of placebo treatments.

##### Factors that contribute to the development and progression of mental health disorders

- the distinction between predisposing risk factors (increase susceptibility), precipitating risk factors (increase susceptibility and contribute to occurrence), perpetuating risk factors (inhibit recovery) and protective factors (prevent occurrence or re-occurrence)
- the influence of biological risk factors including genetic vulnerability to specific disorders, poor response to medication due to genetic factors, poor sleep and substance use
- the influence of psychological risk factors including rumination, impaired reasoning and memory, stress and poor self-efficacy
- the influence of social risk factors including disorganised attachment, loss of a significant relationship and the role of stigma as a barrier to accessing treatment
- the concept of cumulative risk.

##### Application of a biopsychosocial approach, as a scientific model, to explain specific phobia

- the distinctions between stress, phobia and anxiety; variation for individuals with stress, phobia and anxiety on a mental health continuum
- the relative influences of contributing factors to the development of specific phobia with reference to: gamma amino butyric acid (GABA) dysfunction, the role of stress response and long-term potentiation (biological); behavioural models involving precipitation by classical conditioning and perpetuation by operant conditioning, cognitive bias including memory bias and catastrophic thinking (psychological); specific environmental triggers and stigma around seeking treatment (social)
- evidence-based interventions and their use for specific phobia with reference to: the use of short-acting anti-anxiety benzodiazepine agents (gamma amino butyric acid [GABA] antagonists) in the management of phobic anxiety and relaxation techniques including breathing retraining and exercise (biological); the use of cognitive behavioural therapy (CBT) and systematic desensitisation as psychotherapeutic treatments of phobia (psychological); psychoeducation for families/supporters with reference to challenging unrealistic or anxious thoughts and not encouraging avoidance behaviours (social).

##### Maintenance of mental health

- resilience as a positive adaptation to adversity including the relative influence of protective factors with reference to: adequate diet and sleep (biological); cognitive behavioural strategies (psychological); support from family, friends and community (social)
- models of behaviour change with reference to the transtheoretical model including the stages of pre-contemplation, contemplation, preparation, action and maintenance/relapse.

# Unit 3 and/or 4

## Area of Study 3- Practical investigation

### Outcome 3

On completion of this unit the student should be able to design and undertake a practical investigation related to mental processes and psychological functioning, and present methodologies, findings and conclusions in a scientific poster.

- independent and dependent variables and operationalisation of variables
- the psychological concepts specific to the investigation and their significance, including definitions of key terms, and psychological representations
- the characteristics of scientific research methodologies and techniques of primary qualitative and quantitative data collection relevant to the selected investigation: experiments, self-reports, questionnaires, interviews and/ or use of rating scales; reliability and validity of data; and minimisation of experimental bias and confounding and extraneous variables
- ethics and issues of research including identification and application of relevant ethical, health and safety guidelines, and use of human subjects
- methods of organising, analysing and evaluating primary data to identify patterns and relationships including sources of error and limitations of data and methodologies
- models and theories, and their use in organising and understanding observed phenomena and psychological concepts including their limitations
- the nature of evidence that supports or refutes a hypothesis, model or theory
- generalisability of statistics from samples to the populations from which the sample was derived
- the key findings of the selected investigation and their relationship to psychological concepts and theories associated with neural function, consciousness, learning, memory and/or mental wellbeing
- conventions of psychological report writing and scientific poster presentation including psychological terminology and representations, standard abbreviations and acknowledgment of references.