Subject: Psychology

Unit 3

Week	Topic	Learning Focus
Head-start	Research Methods	- Revise research methods included in Units 1 & 2. Students will develop a list of topics they feel confident with, and a list that they need to focus more attention on to master.
1-2	**<u>Area of Study One</u>** Nervous System Functioning	- The roles of different divisions of the nervous systems in responding to sensory stimuli received by the body - The distinction between conscious and unconscious responses including the spinal reflex - The role of the neuron (dendrites, axon, myelin and axon terminals) in transmission of information across the synapse
3 - 4	Neurotransmitter Action	- 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 GABA) - The effects of chronic changes to the functioning of the nervous system due to interference to neurotransmitter function, as illustrated by the role of dopamine in Parkinson's disease.
5	Stress	- 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
6 - 7	Psychological Aspects of Stress	- 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.
8	**<u>Area of Study Two</u>** 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).
9 - 10	Classical Conditioning	- 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 - The 'Little Albert' experiment including ethical implications of the experiment.
10	Operant Conditioning	- 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)

11	Observational Learning	- Observational learning as a method of social learning, particularly in children, involving attention, retention, reproduction, motivation and reinforcement
12 - 13	The Process of Memory	- The multi-store model of memory (Atkinson-Shiffrin) 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.
14 - 15	Memory Retrieval	- Methods to retrieve information from memory including recall, recognition, relearning and reconstruction - 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.
16 -17	Brain Trauma and Forgetting	- 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
18 - 20	**Unit 4: Area of Study One** Nature of Consciousness	- Consciousness as states along a continuum - Measurement of physiological responses in conscious states - Changes in psychological responses in conscious states - The effects on consciousness of sleep deprivation and stimulant and depressant drugs.