




## YEAR 12 Autumn 2 TERM

'An ambitious curriculum that meets the needs of all'

### Medium Term Planning - Topic: Biopsychology

Curriculum Intent	Pupils will be taught, following National Curriculum guidelines, the following this term: Biopsychology
Skills/Assessment Objective Links	<p><b>Why do we teach this to students?</b></p> <p>Students have by now gained a solid understanding of the various influences on human behaviour and seen psychology in action in research methods. Students get to explore a more in-depth investigation of the working of the brain and how this impacts behaviour.</p> <p><b>Why do we teach this now?</b></p> <p>Biopsychology, as a topic, fits nicely after Approaches and it is getting to grips with the more scientific aspect of Psychology, this runs nicely along with approximately the time where teacher 1 is teaching memory. It also makes sense to teach biopsychology after the Biological approach has been taught.</p> <ul style="list-style-type: none"><li>• The divisions of the nervous system: central and peripheral (somatic and autonomic).</li><li>• The structure and function of sensory, relay and motor neurons. The process of synaptic transmission, including reference to neurotransmitters, excitation and inhibition.</li><li>• The function of the endocrine system: glands and hormones.</li><li>• The fight or flight response including the role of adrenaline.</li><li>• Localisation of function in the brain and hemispheric lateralisation: motor, somatosensory, visual, auditory and language centres; Broca's and Wernicke's areas, split brain research. Plasticity and functional recovery of the brain after trauma.</li><li>• Ways of studying the brain: scanning techniques, including functional magnetic resonance imaging (fMRI); electroencephalogram (EEGs) and event-related potentials (ERPs); post-mortem examinations.</li><li>• Biological rhythms: circadian, infradian and ultradian and the difference between these rhythms. The effect of endogenous pacemakers and exogenous zeitgebers on the sleep/wake cycle.</li></ul> <p>The exams will measure how students have achieved the following assessment objectives:</p> <p>AO1: Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures.</p> <p>AO2: Apply knowledge and understanding of scientific ideas, processes, techniques and procedures :in a theoretical context, in a practical context, when handling qualitative and quantitative data.</p> <p>AO3: Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to make judgements and reach conclusions, develop and refine practical design and procedures.</p>
Spiritual, moral, social, and cultural development	<p><b>SMSC:</b> BPS guidelines</p> <p><b>PSHE:</b></p> <ol style="list-style-type: none"><li>1. How to talk about emotions accurately and sensitively</li><li>2. That happiness is linked to being connected with others</li><li>3. How to recognise the early signs of mental wellbeing concerns</li><li>4. Common types of mental ill-health</li></ol> <p><b>British Values:</b> <b>Individual liberty</b> – through understanding that people are products of their neural networks.</p> <p><b>Rule of law</b> – through understanding that psychologists can be barred from the BPS for breaking the ethical guidelines.</p> <p><b>Skills Builder:</b> Critical thinking and analytical. communication and interpersonal, Leadership and teamwork skills, Organization/time management skills, Goal setting and prioritizing.</p> <p><b>Relationships:</b> the functions of hormones and how they can affect our behavior and relationships. The role of adrenaline in affecting behaviour.</p>
Numeracy	<p>Numeracy is embedded throughout the course and across all papers and can appear in any of the topic questions. For example, statistical analysis of concordance studies.</p>
Literacy	<p><b>Vocabulary Tier 2:</b> glands, hormones, adrenaline, post-mortem examination, pacemaker, zeitgeber</p> <p><b>Vocabulary Tier 3:</b> Nervous system: Central &amp; peripheral (somatic and autonomic), Sensory, relay and motor neurons, endocrine system, hormones &amp; glands, neurons, synapses, localisation theory, holistic theory, plasticity, functional recovery, split-brain patients, fMRI, ERP, EEG, circadian rhythms, ultradian rhythms, infradian rhythms, endogenous pacemakers, exogenous zeitgebers, Synaptic transmission, excitation &amp; inhibition</p> <p><b>Reading:</b> reciprocal reading strategies used, eg predictions – many hooks/ starters include asking what do we already know about this topic. Opportunity to summarize eg write down the main points of an argument/ theory. Questioners – does the text raise any questions, group work as an opportunity to discuss. Connectors – can the text be linked to any theories (either for or against). Opportunity to clarify – discussion of any words or ideas that the student didn't understand.</p>

	<p><b>Writing:</b> As Psychology is all exam classes, many lessons are dedicated to essay writing skills for the 8/ 16 mark essays. Students are required to show knowledge which should link to key psychological terminology, application which should integrate fully with the stem and an critical analysis and discussion when evaluating.</p> <p><b>Oracy:</b> group work in the majority of lessons, think pair share activities eg a debate on whether the brain has plasticity or not.</p>
<b>Becoming future ready</b>	<p><b>Personal Skills:</b> As a Psychology student you will learn research skills, an understanding of how people think and behave which is essential in the real world, you will gain an ability to relate and empathise with a range of people, you will gain an understanding of how to listen to others sensitively and good questioning skills, you will learn techniques of how to cope with emotionally demanding situations, you will get the chance to work on your own and with others.</p> <p><b>Careers/Employability:</b> As well as the above personal skills leading to employability, Psychology A level delivers skills employers value, such as numerical skills, the ability to understand and work with statistics, effective communication and the ability to work productively in teams. It also gives an understanding of the human mind and behaviour and so any employment would use these skills as all employment involves working with others in some aspect or another.</p>
<b>Adaptation</b>	Throughout this topic, quality first teaching will provide differentiation:
<b>QFT/SEND Provision</b>	<p><b>By product:</b> differential outcomes using must, could, should.</p> <p><b>By resource:</b> each PowerPoint has different levels of differentiation to access, 'key points' extension, stretch and challenge. Stimulus questions are of a different ability.</p> <p><b>By Intervention:</b> by providing different levels of supervision and support, psychology drop ins, catch up sessions.</p> <p><b>By Progressive Questioning:</b> exploring pupils' understanding through interactive dialogue.</p> <p><b>By Grouping:</b> according to prior attainment, gender, social preference, preferred learning style.</p> <p><b>By Task:</b> Pupils should be involved in the identification of targets which are meaningful to them and in the selection of an appropriate task from the given range.</p> <p><b>By Offering Optional Activities:</b> In class or as homework, to extend learning.</p> <p>This QFT/SEND provision will be explicit within the lesson-by-lesson schemes of work.</p>
<b>Implementat ion Curriculum Delivery</b>	<p>To be able to:</p> <p>Understand the divisions of the nervous system: central and peripheral (somatic and autonomic)</p>
<b>Learning Outcomes  (Most powerful knowledge)</b>	Understand the structure and function of sensory, relay and motor neurons
	Explain the process of synaptic transmission, including reference to neurotransmitters, excitation and inhibition
	Know the function of the endocrine system: glands and hormones
	Discuss the fight or flight response including the role of adrenaline
	Understand localisation of function in the brain and hemispheric lateralisation: motor, somatosensory, visual, auditory and language centres
	Understand Broca's and Wernicke's areas
	Discuss split brain research
	Discuss plasticity and functional recovery of the brain after trauma
	Know ways of studying the brain: scanning techniques - functional magnetic resonance imaging (fMRI)
	Know ways of studying the brain: scanning techniques - electroencephalogram (EEGs)
	Know ways of studying the brain: scanning techniques - event-related potentials (ERPs)
	Discuss the use of post-mortem examinations

	<p>Understand biological rhythms: circadian, infradian and ultradian and the difference b these rhythms.</p> <p>Understand the effect of endogenous pacemakers and exogenous zeitgebers on the sleep/wake cycle</p> <p>Red denotes interleaving; aspects of knowledge covered previously.</p>	
<p><b>Current learning to be developed in the future within:</b></p>	<p>Further discussion of the brain and its effects on behaviour in year 2 topics such as schizophrenia and forensic. Treatments of disorders, the role of neurotransmitters; serotonin, dopamine. Memory topic to support localisation of function.</p>	
<p><b>Assessment</b></p>	<p>Refer to assessment maps for formative and summative assessment opportunities.</p>	
<p><b>Impact</b></p>	<p>Attainment and Progress – Refer to assessment results / data review documentation.</p>	