## **Edexcel GCSE Learning Intentions – Year 10 (Term 2.2)**

| What?<br>When?<br>Why? | Lesson 1 Learning Intentions  | Lesson 2 Learning Intentions   | Lesson 3 Learning Intentions   |
|------------------------|---|--|--|
| 1                      | Biopsychology: Areas of the brain and their functions (frontal lobe, parietal lobe, temporal lobe, occipital lobe, cerebellum, motor-cortex, somatosensory-cortex). | Create a model of the brain with all the lobes and associated functions.   | To introduce various types of brain damage and loss of associated functions (Visual Agnosia and Prosopagnosia).  |
| 2                      | Research Methods: Case Studies – to explain what is meant by a case study and evaluate the usefulness of case studies for research.                                 | To introduce the case study of Phineas Gage and the change in his behaviour linked to brain damage.  | To evaluate the usefulness of Phineas Gage's case study to understand the role of the frontal lobe.  |
| 3                      | To outline the research by Damasio (1994) and use of computers for the purpose of research.   | To evaluate the research by Damasio (1994).  | To outline how messages are passed around the body from the CNS to the PNS via neurons.  |
| 4                      | To outline the structure and functions of neurons, including receptor sites, axon, terminal buttons, vesicles, synaptic cleft, myelin sheath, dendrites.            | To explain how neurons fire including action potentials, neurotransmitters and summation.  | To explain the theory of brain lateralisation including the functions associated with each hemisphere and how the hemispheres communicate via the corpus callosum. |
| 5                      | To explain how the role of the left hemisphere in language including Broca and Wernicke areas.  | To explain the different types of experiment used in psychological research including the manipulation of variables and levels of control. | To introduce the methods of collecting participants for the purpose of psychological research.   |
| 6                      | To introduce the work of <b>Sperry</b> and split-brain research.  | To evaluate the research by <b>Sperry</b> , focusing on the type of experiment and sampling issues.  | To consolidate the research by <b>Sperry</b> and the theory of brain lateralisation, including possible gender differences.  |
| 7                      | To outline and evaluate the development and use of MRI and fMRI as methods of measuring the brain.  | To outline and evaluate alternative methods of measuring the brain including PET, post-mortem and EEG's.                                   | To consolidate and revise the topics covered in Biopsychology.   |