**Curriculum Overview** –Year 11 Biology

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| Term 1 |  | Term 2 |  | Term 3 |
| Term Start - End |  | Term Start |  | Term Start |
| 26/08/2023 – 16/12/2023 |  | 06/01/2025 – 24/03/2025 |  | 7/04/2025 – 27/06/2025 |
|  |  |  |  |  |
| 3. Reproduction and Inheritance |  | 4. Ecology  5. Use of Biological Resources |  | 5. Use of Biological Resources  Past papers and revision |
| 3. In this topic, students will be learning about the reproductive systems in both plants and animals. They will learn about sexual and asexual reproduction and the processes of mitosis and meiosis.  This topic continues into inheritance, where students will investigate DNA and protein synthesis. They will learn about dominant and recessive traits, heritable diseases and mutations, which leads into variation, natural selection and evolution. |  | 4. The Ecology topic covers sampling techniques in the field to allow the students to measure biodiversity. Students will learn the nutrient cycles (nitrogen and carbon) and how human impact is changing these cycles by deforestation, intensive farming and pollution.  5. The last topic allows students to apply their biological knowledge gained throughout the IGCSE curriculum to understand how microorganisms can be utilised for food production via anaerobic respiration in yeast and bacteria to make bread and yoghurt. |  | 5. Finally, we will study the process of genetic engineering and the development of recombinant human proteins like insulin. This extends to STEM cells and advances in modern medicine with novel therapeutics and personalised medicine.  We will allow plenty opportunity to redo required practical work, revisit challenging topics and also practice past papers in preparation for examination. |
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| Assessment |  | Assessment |  | Assessment |
| **Reproduction and Inheritance EOTT**  **Y11 Mock exams** |  | **Ecology** end of topic test |  | **Use of Biological Resources EOTT**  **IGCSE Examinations** |
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