Link to exam board specification:
AS and A Level - Biology A - H020, H420 - OCR

Course Overview:
Don't just live life, study it! We live in a world which is evolving rapidly due to scientific breakthroughs, greater understanding of scientific processes and advancing scientific technology. A level Biology can be a stepping-stone to accessing a range of interesting courses or career pathways leading on from Sixth form. A level Biology includes the study of human biology, animal transport, cellular processes, plant biology, ecology and genetics- to name just a few. It is a challenging academic subject which relies on students being able to process and use a wide range of scientific knowledge and skills to access three examination papers at the end of Year 13. There is no coursework element to the course. However, there is a practical endorsement which involves the opportunity to take part in a minimum of 12 practicals across 12 key areas. These scientific practicals are taught alongside the course and contribute to 15% of the marks in the examinations. Practicals include the study of mammalian blood under the microscope, a heart dissection, colorimetry, investigating factors which affect enzyme activity and field studies. Around 10% of the examination, will involve mathematical skills including the use of statistics.
The subject offers the opportunity to develop and apply a wide range of knowledge about the organisms which contribute to life on Earth and the processes involved.

Areas of Study:
Content is split into six modules:

- Module 1 – Development of Practical Skills in Biology.
- Module 2 – Foundations in Biology.
- Module 3 – Exchange and Transport.
- Module 4 – Biodiversity, Evolution, and Disease.
- Module 5 – Communication, Homeostasis, and Energy.
- Module 6 – Genetics, Evolution, and Ecosystems.

Course Requirements:
Minimum grade 6-6 in Trilogy Science or Grade 6 in Biology as well as a Grade 5 in English and Maths.

Where can this course take me?
A level Biology can lead to jobs in science & research, medicine & healthcare, agriculture, sports & fitness, engineering, and the emergency services to name just a few key areas.

Year 12:

- Cell Ultrastructure and Microscopes.
- Practical Biochemistry: Qualitative and Quantitative Tests.
- DNA: Nucleic Acids: Replication, Codes for Polypeptides.
- Excretion: Liver and Kidney Structure and Function.
- Plant and Animal Responses.

Year 13:

- Photosynthesis & Respiration.
- Cellular Control Systems.
- Ecosystems & Populations and Sustainability.
- Patterns of Inheritance.