Curriculum Rationale		
Subject	**Biology**	
		Key Stage 5

Intent

Biology helps us to understand how organisms are structured and function. It helps us discover how the world works, our place, impact, role and the responsibilities we have. To explore how scientific ideas, develop and how we learn by experimentation. We are committed to providing a stimulating, engaging and intellectually challenging learning environment to enable all our students to develop scientific consciousness, from the basic biological molecules of organisms to species interactions within ecosystems.

The Moral/educational purpose of the Curriculum

Moral education in Science encourages pupils to become increasingly curious, to develop open mindedness to the suggestions of others and to make judgements on evidence not prejudice. Students realise that moral dilemmas are often involved in scientific developments. When considering the environment, the use of further natural resources and its effect on future generations is an important moral consideration.

The course

AQA AS and A Biology.

Why are you teaching it?

This links with the student specialism expanding their knowledge on the human body how it works and how it can affect the world around. The curriculum gives the student an awareness of their actions and as potentials future influencers of society gives them a full overview of the biological world and the human impacts.

Why AQA?

During key stage 5 students learn how the subject content in biology is relevant to the real world. Biology is an experimental subject and so there will be numerous opportunities to carry out practical work, which will help students link the theory to reality as well as equip them with the essential practical skills they need. A level biology will help to prepare students for future study, in areas such as physiotherapy, medicine & nutrition.

Implementations

How will you teach it?

Main class room based lesson with a labs and field interspersed

How will it be sequenced?

Year 12

1. Biological molecules
2. Nucleic acids
3. Cell structure
4. Transport across cell membranes
5. Cell recognition and the immune system
6. Exchange

7 Mass transport
8 DNA, genes and protein synthesis
9 Genetic diversity
10 Biodiversity

Year 13

11 Photosynthesis
12 Respiration
13 Energy and ecosystems
14 Response to stimuli
15 Nervous coordination and muscles
16 Homeostasis
17 Inherited change
18 Populations and evolution
19 Populations in ecosystems
20 Gene expression
21 Recombinant DNA technology

Why is it sequenced in that way?
Exams are grouped into the two different years and each topic builds on from the last creating a wider picture thatinterlinks.

Impact

How will the student develop and grow as a result of this Curriculum?

The AQA biology A level curriculum will help to develop young people who can become proactive, independent and resilient scientists. The curriculum was created to ensure that the subject content is relevant to real world experiences and is interesting to teach and learn. AQA involved over a thousand teachers in developing these specifications and it can be taught in the way that works for our students. A-level Biology is a stepping stone to future study, which is why universities were approached during itsdevelopment to ensure these specifications allow students to develop the skills that they want to see.
This approach has led to specifications that will support to inspire students, nurture a passion for Biologyand lay the groundwork for further study in courses like biological sciences and medicine.