Curriculum Rationale		
Subject	**Science**	
	Key Stage 4	

Intent

Science plays an important role in today's society. Through science we aim to prepare students for their life ahead, be that professionally or as democratic citizens. Science develops such key skills as the ability to recognise the difference between good and bad arguments and being critical of sources of information – something which is more relevant than ever.
In science we will also support the students in developing their ability to form opinions and how to argue and back these opinions up using knowledge and understanding.

For an individual to to have an opportunity to influence the situation they are in – both locally and globally – it is imperative that they have the knowledge and skills require to understand this situation. Many of the challenges the world is currently facing (such as climate change and automation of the workforce) is based on understanding of science. By facilitating the development of students' knowledge and understanding of science we provide them the best opportunity to engage in the onging global discussion of these topics.

Science also plays an important part in culture. Our understanding of the world has been shaped and changed over the course of history due to science and as science continues to develop, as will our understanding of the universe as a whole. Many pioneering scientists were British and as such are part of a shared national and global heritage that is important for the students to recognise.

Implementation

We will be teaching the AQA Combined Science: Trilogy specification to support the students in seeing each discipline of science as part of a whole. This will allow us to make the links between each individual discipline of science more clear to the students with the intention of them gaining the understanding that all sciences support each other to create a picture of the world we live in.

Yr 9 based on foundational topics in biology, chemistry and physics. Get understanding of what prior knowledge each student comes with (due to many feeder schools) and allows for common basis on which to build for future, more difficult topics.

In Year 10 students will be introduced to more concepts and topics which are more abstract in nature and requires them to use the skills and understanding gained in Year 9.

In Year 11, topics will rely on students applying their understanding of science and scientific method to higher order thinking such as evaluating.

Impact

Students who are capable and confident in evaluating and expressing personal opinions in a way that builds on facts and understanding.
Students that understand the importance of science in a cultural context – see it as necessary for understanding of future societal dilemmas.
Ability to think critically regarding scientific method to know if information (news stories etc) are believable and valid.
To recognise and value the contributions to society of people working within science from a range of different backgrounds and specialisms.
To be able to identify potential pathways into further education and employment in the field of science, engineering and technology.
To be able to reach valid conclusions through the evaluation of available evidence and information whilst taking into consideration the reliability of this information.
To understand their role in developing a sustainable society in the context of current and future changes to global systems and processes.