

Intention of BTEC Applied Science

Our Applied Science course intends to provide an alternative pathway for our students to access scientific careers. This could be via post 18 employment, but usually entails our students successfully accessing university courses to continue their scientific learning. We have had great success with past BTEC students going on to read for degrees in areas such as child nursing and radiography. The Applied Science curriculum requires students to cover and recall the fundamental principles from all three scientific subject areas. Students develop practical and then subsequently, report writing skills, including producing accurately referenced material from a wide range of resources. They perform standard solution production and titration in the chemistry learning aim, chlorophyll chromatography in biology and look at the physics behind heating and cooling. The emphasis we place on accurate referencing will enable our students to move comfortably into their university courses.

Students also have the opportunity to complete a whole investigation from devising a hypothesis to the evaluation of data and the procedure. We nurture these skills via 5 different experimental topics: ecology, electrical circuits, diffusion, fuel combustion and enzymes. The curriculum develops not only the theory of that component, but each practical area will be used to develop a scientific skill: ecology, for example, will be used to deliver the knowledge required on statistical analysis.

There is also an option to study the human regulation and reproduction, as students are often most interested in human biology and links to the specialist knowledge of our teachers. Practical experiences are an essential part of this subject discipline, which will allow students to increase their confidence when performing experiments in their future academic or employment journeys.