

## **Synopsis of the Science Department at The Bemrose School.**

The science department at The Bemrose School is made up of a range of experienced and early career teachers, across all disciplines, who all share a passion for enthusing and engaging pupils from all backgrounds in science.

The department is well established, and sits across 2 buildings with modern labs, opened in November 2018, the majority of which are equipped with plasma teaching screens and the latest technology to support teaching and learning. Most full-time teaching staff have their own lab as a base but both buildings also have access to a work room for staff to work collaboratively as a team.

The Bemrose School science curriculum strives to produce young adults of the future who are capable of questioning and interpreting information to make sense of the world around them. We encourage pupils to think scientifically, developing their critical thinking skills and fostering an enthusiasm to find out more. We want students to be able to make sense of the world around them, to understand how science applies to their lives and for it to open doors to a wider variety of potential careers.

In Years 7, 8 and 9 (up until January) students, follow the KS3 science programme of study "Activate Science". The programme of study covers the National Curriculum areas of Biology, Chemistry, Physics and working scientifically. There is a specific focus on investigative skills and the development of the scientific method.

In January of Year 9, students begin an introduction to key stage 4 topics with a focus on developing their scientific skills needed for GCSE.

At KS4, pupils study for either Combined Science (Trilogy) AQA GCSE or Triple AQA Science (if chosen as an option).

In Years 12 and 13, we offer Pearson BTEC Level 3 National Extended Certificate in Applied Science. We have aspirations to offer Biology, Chemistry and Physics into the future at 'A' level.

Our lessons are informed by cognitive science: clear explanations, strengthening of core knowledge through regular recall and directed questioning, opportunities for pupils to embed and apply knowledge every lesson, frequent low-stakes tests and regular feedback.

The Aims of Science Education at The Bemrose School are:

- Students regard science as an exciting and interesting subject.
- Students recognise its relevance to their everyday experiences.
- Students are successful in science and gain qualifications, which are important for their future.
- The science teaching inspires a healthy number of students to study science further at college and university.
- Students develop scientific skills, which help to solve problems and to think critically helping to enable them to make informed judgements in their lives.

- Science complements and supports other subjects and enables students to develop their literacy and numeracy skills.

Educational visits are offered to different groups in all Key Stages and we have afterschool 'period 6' lessons for students that wish to develop their understanding further and to deepen their knowledge.

We expect all our students to try their best and follow the code of conduct in lessons and around school. Good science can only take place when everyone respects each other and themselves.

The professional development of teachers in the school, and in the department is at the heart of the school ethos. At our most recent Ofsted inspection it was commented that:

*'Teachers are extremely complimentary about the support and professional development they receive ... [they] told inspectors that their confidence as practitioners was 'really developing' as a result of this work.'*