

Synopsis of the Science department at The Bemrose School.

The Science department at The Bemrose School has a wide range of experienced and enthusiastic teachers from a variety of backgrounds, some of whom have experience working in other professions before entering teaching, which they can call on to help make science relevant to student's lives and help bring science to life.

We aim to inspire students by teaching a memorable science curriculum through the delivery of great lessons that inducts "powerful knowledge" in students allowing them to access the most rewarding endeavors. Our lessons are informed by cognitive science: great explanations, strengthening core knowledge, Shed Loads of Practice, frequent low-stakes tests, retrieval practice as well as explicitly teaching students how to revise independently.

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.

We have great resources with brand new labs, opened in November 2018, equipped with either data projectors or 75inch plasma teaching screens and the latest technology such as visualisers to help teaching and learning and to bring technology into the classroom. In September 2019, when the labs in the main building are fully refurbished and newly equipped each teacher will have their own lab.

Trips 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.

Our ethos is to work smart. We aim to provide the best possible structures to help our students succeed and support them in their learning journey. We offer various revision events before and after school and during the holidays for students who need that extra boost and we are proactive in tracking students' progress closely to allow us to highlight and help students that require extra support to achieve their potential.

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, inspections 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.'

In Years 7, 8 and 9 (up until January) students, follow the KS3 Science programme of study "Activate Science". The programmes of study cover 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, Year 9 students move on to more challenging key stage 4 topics and get a chance to develop their scientific skills needed for GCSE.

In the second half of Year 9 and in Year 10 and 11 students will follow the KS4 programme of study to prepare 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 that students can study depending on entry requirements. We have aspiration to offer Biology, Chemistry and Physics into the future at A' level. Students that achieve a grade 4 or higher in Combined or Triple Science GCSE can study.