

## Science



The successful applicant offering their specialist science subject at sixth form level and to teach Science at KS3 and 4 will join a highly enthusiastic, innovative, hardworking and well-united team for whom the students and the Academy are a priority.

The department currently consists of twelve teachers and they are well served by a team of three full time technicians. Science is taught in nine newly-refurbished laboratories, built to a high standard with state-of-the-art technology. Each lab has a fully functional interactive whiteboard and the department has a wealth of software, which can be used in conjunction with the white boards to support learning. This well-resourced department has a state of the art digital microscope, data

logging equipment and its own suite of ten computers in the Science team base room. These are used by staff and small groups of students to gain internet access. Teachers also have access to 30 laptops for use by students in the labs.

Science teachers are expected to use a variety of teaching strategies, which reflect technological, independent and personalised styles of learning. An emphasis on high expectation and the achievement of excellence is the Academy ethos and the Science team reflects this in its delivery of the curriculum and the achievements of the students.

Science classes are set according to ability and achievement from year 7 and teachers are expected to differentiate teaching and learning within the various sets according to the needs of their students. The setting of targets, homework and the informative marking of books in line with assessment for learning criteria are integral parts of the learning process. Teachers are required to regularly mark assessments, record results and track their students' progress.



Enrichment is a core element of the science department's success and all science teachers are expected to be committed to ensuring students are given opportunities to learn about the application of science and build upon their curiosities. Science week, clubs and trips are essential parts of ensuring students at Ashcroft are engaged in this course subject. The Academy has recently been awarded the "Best STEM club in the country" and members of the STEM club enjoyed an all expenses paid prize trip to CERN.

At KS3 students follow the Activate new scheme of work as preparation for the 9-1 GCSE. KS3 is important for skills development therefore students plan and carry out their own investigation, from Year 7. At KS4 students follow the OCR 9-1 Gateway Science course, which we begin at the start

of Year 9. The majority of students are completing the Combined Science course. The most able students have the opportunity to opt to study the Triple Science GCSE course.

2017 saw our science GCSE results above the national average again. We achieved 100% pass rate on all Science GCSE courses. 78% of Additional Science students achieved A\*-C grades (national average is 68%.) In triple Science, 83% achieved A\*/A in Biology, 79% achieved A\*/A in Chemistry and an impressive 97% achieved A\*/A in Physics.

We offer A levels in Biology, Chemistry, Physics with several classes for each subject. We also offer the International Baccalaureate in Biology, Chemistry and Physics at both standard and higher level for sixth form students. Science is extremely popular in the sixth form with over 90% of all students in the sixth form studying at least one science course. KS5 results at Ashcroft Technology Academy are the highest in the borough and Science results are all above the national average. In Chemistry 39% of A2 students gained A\*/A grades and students are now studying a variety of science courses at various Russell group Universities including Biomedical Science at Imperial and Medicine at Cambridge.

## **Specification**

We are looking for someone who:

- is committed to the aims and ethos of Ashcroft Technology Academy
- understand the importance of 21st Century Science and is positive about promoting the application of science theory
- will play a full role in an energetic and enthusiastic team
- is ambitious and seeking to further their professional development
- has the potential to deliver good examination results
- wants to participate in curriculum development
- displays a commitment to excellence across the ability range
- has good ICT skills and understands the potential of ICT in Science teaching
- has high expectations of him/herself and of students, and the presence to promote them in the classroom and beyond