NORTHGATE
High School

Science Department Information



Science at Northgate is part of the core curriculum for Years 7 – 11 with all students in Years 7 and 8 studying Science for 10% of their timetable, in Year 9 for 15% and in Years 10 and 11 for 20%. The school timetable consists of 20, 75-minute lessons per week. Science is taught in mixed ability groups by one teacher in Years 7 and 8 and by separate Biology, Chemistry and Physics teachers in Years 9, 10 and 11.

At Northgate the Key Stage 3 Science curriculum has been condensed into Years 7 and 8 following a scheme of work written in-house, created to fully reflect the National Curriculum. In Key Stage 4 we follow the AQA Combined Science: Trilogy and the AQA separate sciences GCSE courses. Approximately half of our students in Years 9, 10 and 11 study separate sciences (Triple Science) as part of an accelerated course, taught in the usual science curriculum time, leading to three separate GCSE grades. The remainder of our students study Combined Science, leading to two GCSE grades. All members of the department are actively involved in the continued development of these courses.

In the Sixth Form, courses are offered in OCR A-level Biology A, Chemistry A and Physics A. In Biology there are currently four groups in Year 12 and three groups in Year 13, in Chemistry there are three groups in Year 12 and three groups in Year 13 and in Physics there are two groups in Year 12 and two groups in Year 13. Additionally, we offer a BTEC National in Applied Science (AAQ), currently one group in Year 12 and one group in Year 13.

The Science department has an excellent reputation, and GCSE and A level examination results have consistently been strong. At GCSE we have high proportions of students achieving two or more grades at 4+ or 5+. A-level uptake is high, and student performance is strong, with many of our students progressing onto higher education courses in the sciences.

The Science Department consists of a large team of 19 well-qualified teachers and three full-time technicians who work together in a friendly and supportive environment. Teachers specialise in the department areas of Biology, Chemistry and Physics, but work outside of their specialist fields in Years 7 and 8, and very occasionally in Years 9, 10 and 11.

Science teaching takes place in the Science and Technology Centre where there are 13 well-equipped laboratories. ICT provision in science is excellent. Each laboratory has a fixed computer, large interactive television, and visualiser. We have three sets of iPads for use with students in science lessons. Science teachers benefit from use of a provided laptop. Sharing of detailed and well-developed resources using OneNote alongside the interactive televisions has transformed the delivery of lessons and interactions with students.

We are driven by a pursuit of excellence in both delivery and outcomes and have taken a lead role in the development of teaching and learning strategies across the school. We also continue to develop opportunities for learners to engage with science outside of the curriculum and are building links with higher education and the wider community. We continue to strengthen and build on links with local secondary schools, professional associations and teacher training institutions. The department is always looking for new ways to engage students both in and out of lessons and all staff are involved in these developments.

We are very proud of the Science Department at Northgate and of the achievements made by all our learners. We are very keen to appoint high-quality teachers who support our aims and who are willing to actively contribute to the continued development of teaching and learning strategies.